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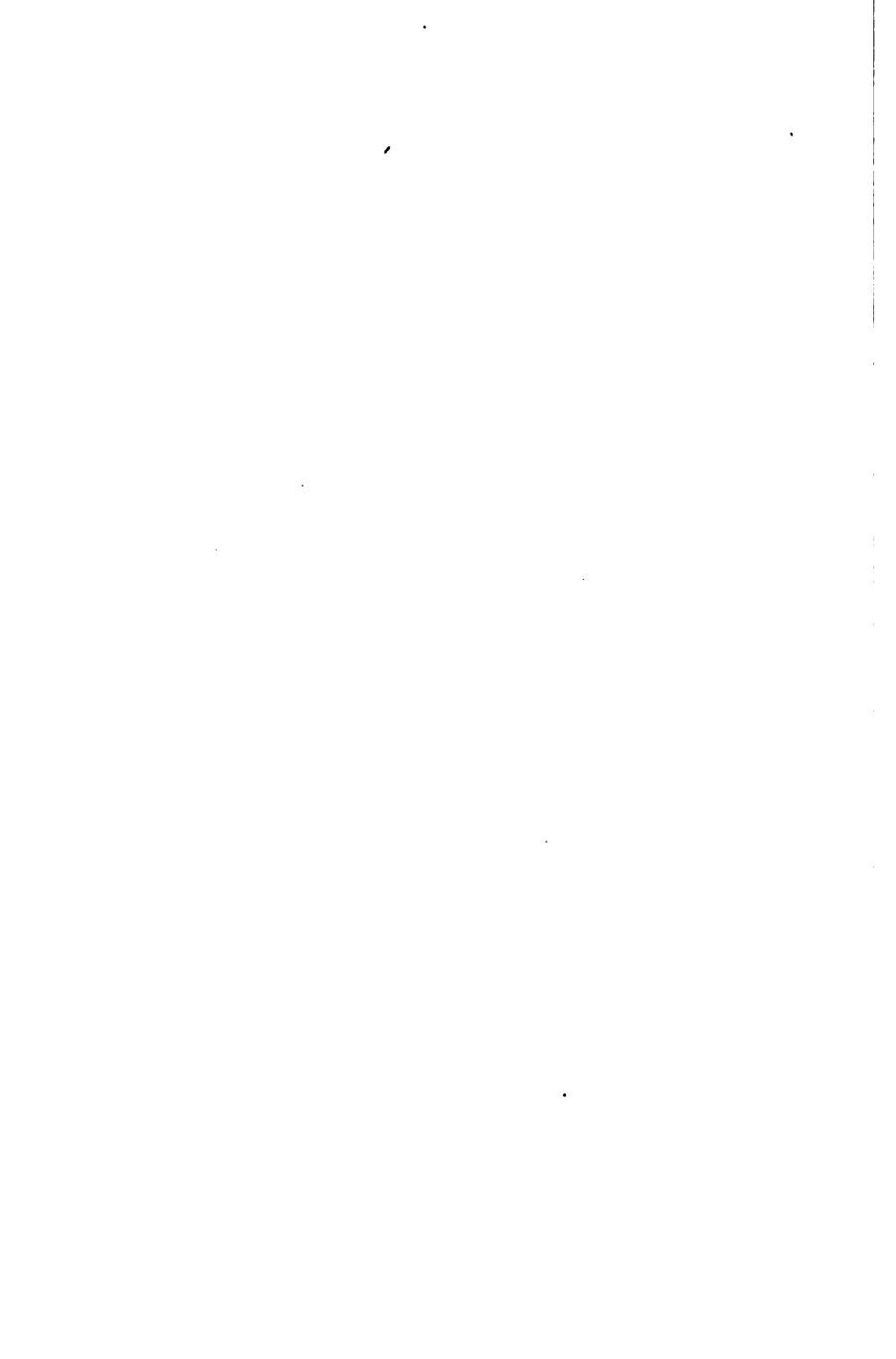
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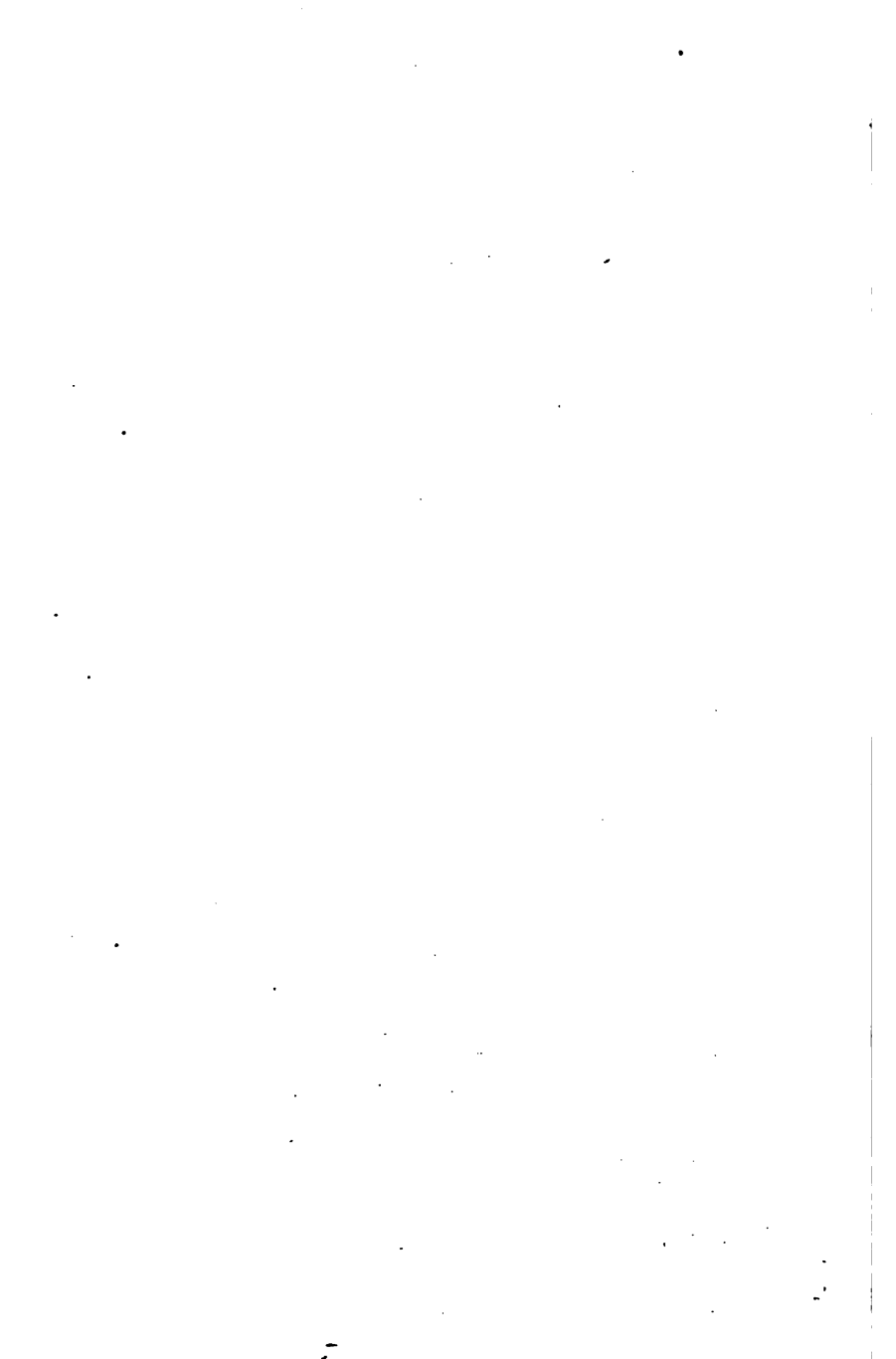








**LECTURES ON EDUCATION.**



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# LECTURES

ON

## THE HISTORY OF EDUCATION IN PRUSSIA & ENGLAND

AND ON KINDRED TOPICS

BY JAMES DONALDSON, LL.D.

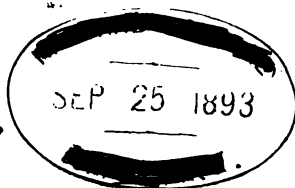
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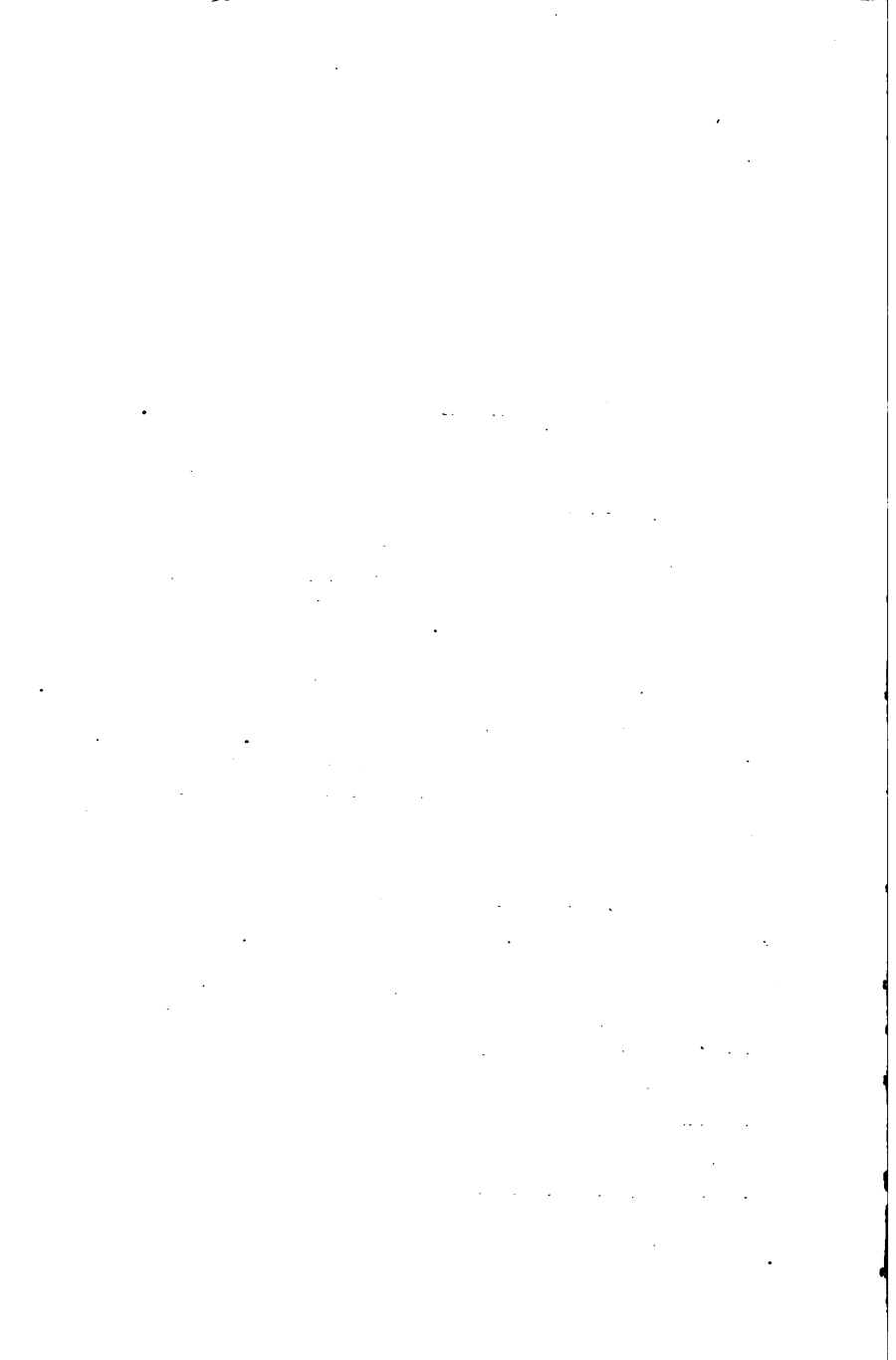
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## PREFACE.

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THE first two lectures in this volume were delivered in January 1874 to the Philosophical Institution of Edinburgh, in the Queen Street Hall, the place in which the United Presbyterian Church holds its annual Synod. The third lecture was delivered in Edinburgh in 1871 to the High School Literary Association. The fourth was published in the *Museum* for April 1866, after having been given in Stirling, Dunfermline, and Edinburgh; and the fifth was an article that appeared in the *Museum* for 1864.

To the two first lectures I have affixed a list of the books which seem to me the most important on the subjects discussed. But I do not intend the list to be exhaustive. I am under obligations to a great number of books and pamphlets, which it would be tedious to enumerate; but, perhaps, I should not have omitted to mention Keller's *Collection of Laws on German Instruction*, and the recent contributions to the question of English Education, by Professor Payne, Mr. Fitch, and Professor Morley.



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\* THE works to which the author is most indebted in this Lecture are the following :—

Das Unterrichts-Wesen des Preussischen Staates, von Ludwig von Rönne. 2 vols. Berlin, 1855.

Die Gesetzgebung auf dem Gebiete des Unterrichtswesens in Preussen vom Jahre 1817 bis 1868. Berlin, 1869.

Statistische Nachrichten über das Elementar-Schulwesen in Preussen für die Jahre 1862 bis 1864. Berlin, 1867.

Geschichte des Preussischen Volksschulwesens von Fr. Ed. Keller. Berlin, 1873.

L'Instruction Populaire en Allemagne, en Suisse et dans les Pays Scandinaves par Frédéric Monnier. Paris, 1866.

L'Instruction du Peuple par Émile de Laveleye. Paris, 1872.

L'Instruction Publique en Allemagne par C. Hippeau. Paris, 1873.

Report on the State of Elementary Education in Germany, by the Rev. Mark Pattison, B.D. In volume iv. of Reports of the Education Commission, 1861.

Notice should be taken also of the Histories of Pædagogik, by Raumer and Schmidt, and of Mr. Quick's exceedingly interesting book, Educational Reformers.

## LECTURE I.

### HISTORY OF EDUCATION IN PRUSSIA. \*

Two Methods of treating the subject—The Reasons for adopting one—Gradation of Schools in Prussia—Educational Legislation—Nature of the Prussian Success—Attitude of the Churches towards Education—History of relation between Church and State in Education—The Churches divided into Evangelical and Roman Catholic—The Teachers and Religion—The German Parliament of 1848—The Reaction—Bismarck and Falk—The action of the State in Education—Opinions of Philosophers—History of the State's efforts—The mode of regular Education—The Schoolmaster—The people—Wide appreciation of Education—Reasons for it—Pestalozzi—Study of the Science of Education—The belief in Education—Frederick the Great—Stein.

THE subject on which I have undertaken to lecture this evening is the history of education in Prussia. It is not the history of education in Germany. In the matter of popular Education some of the German States are ahead of Prussia; but throughout these various States there prevails such a variety of method and of organisation, that it would produce nothing but confusion if I were to discuss their educational systems in one lecture.

In dealing with my subject, two courses lie open for me. History is the evolution of the divine ideas in human society. All the passions and perplexities,

all the associations and efforts of man, all the intellectual and moral movements that take place, are but the seemingly discordant notes which go to form one world harmony. And when we thus conceive history, it is the part of the historian to ascertain the exact truth, to evolve the real motives and motive forces that urge men on, and to place them in harmonious relation with each other. If I were to treat the history of education in this way, I should require many more hours than one to attempt to do justice to my theme; and so I must relinquish this method. The other plan that lies open to me is one more within the range of accomplishment, and more in harmony with what the directors of this institution wished when they asked me to deal with this subject. I take one human phase of the subject, and try to show you how such means have had such a result. But I must do this with a caution. We can gather lessons from history. It is indeed full of instruction for us. But one prominent lesson of history is this, that all mere reproducers of the past, all who simply imitate what has taken place before, are sure ultimately to fail and be despised. We are ourselves now making present history, and we must weave the web, not from the tattered garments of past ages, or of foreign nations, but out of our own living selves, from the vigorous and healthy action of our own minds and hands. In treating the history of Prussian education, therefore, I do not wish to propose anything for your bare imitation, but to lay before you as accurate a statement of facts and ideas as I can within my limited time.

I start then from this universally acknowledged fact, that the Prussians have organised a successful system of education. How have they been successful in this matter?

In answering this question it is essential that we have a clear idea of the nature of the success. And in order to your attaining this, you will allow me to give you a short account of the Prussian organisation of schools. The school for the mass of the people is called the *Volkschule*. The children attending this school are from seven to fourteen years of age. The obligatory age is from the commencement of the seventh to the end of the fourteenth in most provinces. The child of five years of age is admissible. "The object of the school is to guarantee to the Prussian youth, through instruction, practice, and education, the foundations of culture and moral fitness for life in the State and in the Church, as well as for their trades or callings." For this purpose they receive instruction in religion. They learn to read, write, and speak their mother tongue accurately. They are made acquainted with the physical features and geography of Prussia. They are taught Prussian history; and they receive practice in arithmetic and drawing as far as is necessary for the life of a citizen. They are also taught music and gymnastic exercises. A higher grade of the *Volkschule* is the *Bürgerschule*, or citizens' school, where in addition to the subjects already mentioned, fuller instruction is given in history and geography, and the pupils may learn mathematics and some foreign languages.

Rising in grade we come to the *Realschulen* or

practical schools, and the *Gymnasien* or culture schools. Both are for pupils of the same age, from about nine to eighteen. Both classes belong to what are called higher schools, and have for their common object "to give to Prussian boys the foundations of a scientific culture, and to develop their moral power." The *Realschulen* are intended for those who, in their future careers, have to deal with matter inventively or spiritually. The pupils are to be masters of manufactories, civil engineers, or such like, and will have to apply the laws of matter to carry out the conceptions of their minds in material forms. Accordingly, the central subjects of instruction are modern languages, mathematics, and the natural sciences. They finish their education in the higher technical schools for special departments, in what we may call technical colleges. The *Gymnasien*, on the other hand, are intended either for those who have the means and leisure to give themselves a purely human culture, or who intend to act upon the minds of their fellow-men through intellectual and spiritual means. The central subjects are therefore the ancient languages and mathematics, and the students pass from the *Gymnasien* to the universities. The universities are the final grade. "The task of the universities is the advancement of science in general, and the scientific training and equipment of the future servants of the State and the Church in particular." The student here enters a widely different phase in his career. At the *Gymnasien* the aim has been to give him an equable rounded and complete development of all his powers; but, cha-

racterising his state generally, we should say that his mind has been more receptive than productive. The university stage is considered the stage for production. At the school he has acquired all the tools requisite for original investigation. At the university his work is to investigate. He can choose his own department. In that department he can choose any subject for special examination, and to that subject he is expected to apply all the powers of his mind, stimulated by the example of professors in the same department who are giving to their students specimens of the best that they can do in the way of original investigation.

Such is a general outline of the Prussian system. It will be noticed that this system is based on *ideas*, that every grade of schools has a special aim and purpose assigned to it, and that its arrangements are made to attain this purpose. One of the most important features of the history of Prussian education is the treatment of this question as to what should be the purpose of each grade of schools. There is a wide diversity of opinion on this subject. Those definitions which I have given you are the definitions of the Prussian cabinet of 1862, and especially of Bethmann-Hollweg, Minister of Instruction at that time. The Prussian system includes within it many other kinds of schools, such as industrial schools and schools for the blind. You will also notice that the system does not include schools for the higher education of girls. This subject has again and again attracted the attention of the Prussian cabinet and ministers of education ; and the last plan of an edu-

cation bill contained a provision for the establishment of *Gymnasien* for girls, but as yet comparatively little has been done in this direction.

Prussia possesses several States which at various times have been added to the dominion. These States had different systems of education, and Prussia is behind some other States of Germany in that it has never been able to bring all its schools under one uniform law. An Education Act for Prussia has yet to be passed. Three attempts have been made by Altenstein, by Ladenberg, and by Bethmann-Hollweg, but difficulties, especially religious difficulties, have stood in the way. This diversity appears most of all in the different modes of supporting and managing the schools. But if you remember that the following statements may be subject to modification in certain localities, I may describe the management thus. Prussia is divided for governmental purposes into eleven provinces, not including Hohenzollern. Before 1866 there were only eight provinces. These eleven provinces are divided into thirty-five governmental districts (*Regierungsbezirk*). The districts are divided into *kreise* or circles, and the circles are composed of *gemeinde*, communes or parishes. There are school-boards for the parish, for the governmental districts, and the province. The parishes are bound to maintain the *Volkschule*, or people's school, and to take a special interest in it. In questions of doubt the case is referred to the board that regulates the affairs of the governmental district. This board has also the supervision of the school committee of town or parish. Each province has a special school-board,

which undertakes the care and control of the *Realschulen* and *Gymnasien* ; and there is for the whole empire a Minister of Instruction and an Education Board, having superintendence of the whole of education, and the care of the universities in particular. There are thus four boards dealing with education—the school committee of the town or parish, the board of the governmental district, the board of the province, and the board of the empire, and at the head of all is the Minister of Education.

Let me note now wherein the success of this system lies. It is acknowledged on all hands that the *Gymnasien* are the best in the world, and that the universities are completely successful in producing the highest scholarship and the greatest scientific attainments. The system of higher instruction has given to Prussia, and to the rest of Germany along with her, the foremost place in the investigation of truth ; and all other civilised nations are indebted to her for a great deal of the stimulus which they receive in the prosecution of scholarship and science. The Prussians have laid special stress on this point. They believe that the thorough education of the middle classes is the surest foundation of a stable and efficient government, and they have acted on the conviction that there cannot be a good popular education if there is not a thoroughly good high education. Their popular education is not deemed so complete a success as the higher ; but this is not because Prussia fails to accomplish what she aims at, but because her aims are not high enough. Her success in popular education may be stated thus :—

For the last forty years nearly every human being in Prussia capable of being educated has been educated, and at least nine-tenths have received all the education which the State thinks it desirable that the labouring classes should have. Thus, for instance, in Berlin, in 1851-52, there were of those that entered the army without education 0·22, with defective education 5·12, with satisfactory 94·66 per cent. The last official statistics on this subject are for the years 1862 to 1864. In 1864 Prussia, with her eight provinces, had 19,226,270 inhabitants. Of these 3,457,301 were children of the ages from 5 to 14. Of these children 2,938,679 were in the public elementary schools. Of the remaining 518,622, 503,054 could be accounted for as being in private schools, or in institutions for higher education, or in some such way, leaving 15,568 children unaccounted for. But the writer thinks that it would be a rash inference that these children are growing up without instruction, for there seems, especially in the account of one province, some mistake. And he remarks on the result: "The recognition of the fact that the securing of good school instruction is a benefit for the children, may be regarded as universal, and renders easy the official control of school attendance. The prosperity of trades, the lively intercourse which widens the circle of vision, the competition in the different branches of business, the influence of the great creations of industry and art, and of scientific investigations, participation in public occurrences, awaken the spirit of the nation, and lead it to a recognition of the worth of mental culture

and respect for the school. Even to children, to whom these points of view are still far distant, attendance at school is something that they look on as a matter of course. They are accustomed to see their playmates going to school, and look forward with eagerness to the day when they will join the elder children in going to the school." You will remember that these are the words of a cold official statistical document, but they give faithfully the nature of the Prussian success: nearly every child under instruction at six or seven: nearly every child able to read, write, count, draw, sing, and with a fair knowledge of the history and physical geography of Prussia at fourteen: and a universal recognition of the value of education even amongst the lower classes. The question we have now to answer is, How has this result been attained?

And first we must look at the attitude of the Church to popular education. With the Greeks and Romans education was widely spread, and the culture that was aimed at was a human culture, an effort to bring into play all the faculties of man. But, through various causes, this culture vanished before the peculiar forms which Christianity assumed, and in the middle ages almost the only educated men were the clergy. The people were sunk in ignorance, and in the eyes of the clergy required no illumination of an intellectual kind. They could direct them how to save their souls and be secure for eternity, and if once secure about eternity they need trouble themselves no further with intellectual aims and speculations. In this state the Reforma-

tion found the masses of the people. The Reformation roused these masses, and to some extent appealed to them. The Scriptures were put into their hands. Yet still the clergy believed that the one use of literary culture for the people was to read the Bible, and they claimed this work entirely as their own. Any schoolmasters whom they might employ were officials of the Church. This was the case in all the countries of the Reformation. In Germany some arrangements were made to carry out this instruction, and at any rate a foundation was laid. But the work was done in the most careless manner, and when in the eighteenth and nineteenth centuries there were others besides the clergy who felt an interest in the work of education, a conflict arose between them and the clergy. The Church asserted that the work of education was hers. The others asserted that it was not specially the work of the Church, but the work of parents, the work of man as a social being. In some cases this conflict has been a terrible obstacle to the progress of education. In Prussia it has not been so to any great extent. And for this there seem to me to be two reasons in particular.

In the first place, the Church in Prussia is under the control of the State. Luther disliked giving political power to ecclesiastics, and wherever his influence prevailed, the prince or king was placed at the head of the Church. Prussia has had a succession of kings who used their power vigorously in this matter of education. In the earliest period after the Reformation the consistory of the Church

had the control of educational matters. It was under the control of the elector, then of a privy councillor (*Staatsrath*), and after that of the minister of justice. But the work was so badly done that many districts were almost entirely destitute of popular education. The whole instruction that was given was generally given by the sacristan, or beadle, of the Church. On November 10th, 1722, a law was passed that "for sacristans and schoolmasters in landward parishes no workmen be admissible except tailors, weavers, smiths, wheelmakers, and waiters." On 17th September 1738 we have a rescript against "vagrant tailors and tramps, and vagrancy, and that in the landward parishes no tailor be endured except the sacristan and schoolmaster." The schoolmaster was in those days always a handicraftsman, sometimes with privileges, as keeping a wine-shop; and even after Frederick the Great did his best to alter this state of affairs, he had to relegate the task of teaching to some extent to invalided soldiers. The Church had thus really neglected the education of the people. The State interfered. Frederick William, the Father of Frederick the Great, gave a present of 50,000 thalers as the commencement of an endowment for education; and Frederick the Great struck in more deeply. He took the supervision of the schools out of the hands of the consistory, and established an *Ober-Schulcollegium*, or supreme council of education. This instruction (Feb. 22, 1787) commences: "As it is of extreme importance to us that in our lands everywhere, through suitable instruction of the youth, good men and useful citi-

zens be educated for every rank; but this important object cannot be better attained than through a uniform universal inspection, which extends over the whole of the united education of our lands, and conducted according to principles tested in one way, we have resolved to appoint a supreme council of education [*Ober-Schulcollegium*] over all our royal lands." This was the first decided step to separate the school from the Church, and to constitute it a State institution by itself. A further impulse was given by the provisions of the *Allgemeines Landrecht*, which had been prepared in the reign of Frederick the Great, but was not published till 5th February 1794, during the reign of his successor Frederick William II. This *Landrecht* is still the law for education in Prussia. It affirms that schools and universities are institutions of the State, and that all public schools and institutions for education are under the superintendence of the State. But Frederick the Great did not rashly meddle with the Church. Before his time the clergyman of each parish was the superintendent of the people's school. Frederick did not alter this, but he made it a reality. He demanded that the clergyman should make himself acquainted with the art of teaching; and in the performance of his duty as inspector he was to visit the school once a fortnight, and to examine most minutely into all the affairs of the school. In fact, the clergyman must have been nearly as much of a schoolmaster as a clergyman. Later laws continued this practice. Thus, for instance, by a law for Brandenburg, 1841, the clergyman of a landward

parish had to teach four hours a week. In almost all schools he took the most arduous part of the religious instruction into his own hands. A still further advance was made when in 1808 a section of the ministry of the interior was assigned to religion, education, and medicine. And finally in 1817 a separate ministry for religion, education, and medicine, was formed, and Altenstein was chosen the minister. This *Ober-Schulcollegium*, and especially the minister, have prevented religious differences from interfering with the thoroughness of the education. The minister draws out his scheme of action for the time. He cannot contravene the laws, but if no law exists he has the power to make laws for the time being. They are not part of the national code, but they have all the force of laws until either the government make a law, or he or his successor issues different regulations. Accordingly, religious differences which cannot be settled are left unsettled. The minister gives his decision in each particular case as it occurs, but meantime he sees that the work of education is going on.

The other reason why religious differences have not injured greatly the progress of education is that the Prussians have clung closely to the form of their ancestral religion. They regard the Church as a unity intended to embrace within it all varieties of opinion, and allowing great liberties to its members provided they are honestly attached to its traditions and wish its permanence. They have been willing to sink their minor differences, and unite together in being members of one Church. And it is well

known that the Protestant Church of Prussia has allowed its members great latitude of thought, and in consequence of this latitude there has been in the Prussian mind a general tendency to attempt the reconciliation of various lines of thought, and show their substantial identity. Thus, for instance, Hegel's philosophy was an attempt to reconcile the most orthodox forms of Christianity with philosophical speculation. The Tübingen school have always maintained that beneath the formulas of the Church there were real and profound truths which form the basis of the absolute religion. And so it has happened that there have been few dissenters in Prussia. In the official document of 1864, mentioned already, the children of dissenters at school are set down as 6010, 2197 in towns and 3813 in the country. This is exclusive of Jews, for whom special provision is made. There are thus only two forms of religion in Prussia, the Evangelical (or Protestant) and Roman Catholic. The Evangelical is a union of the Reformed and the Lutheran; but though the Reformed and Lutheran are really different, the law wishes to ignore the difference. The existence of only two forms of confession makes the religious difficulty a matter of easy solution. All schools belong to either the one or the other, because all the children belong to the one or the other. Where the confessions are not strong enough to support a separate school, there are what are called simultaneous schools; that is, schools where, if there is only one schoolmaster, one of each confession is appointed in turn. The Evangelical is always succeeded by a Roman Catholic, and the

Roman Catholic by an Evangelical. Where there are two masters, one must be an Evangelical and the other Roman Catholic. This is a very unsatisfactory kind of arrangement, and the Government has always endeavoured to make the number of such schools as small as possible.

Prussia thus contributes nothing to the solution of the religious difficulty by any of its enactments. There is a conscience clause in all its schools; but this conscience clause simply means that an Evangelical child is not bound to attend Roman Catholic teaching, nor a Roman Catholic Evangelical teaching. There have been dissenters in Prussia, but the Government is always inclined to look upon their associations as political; and sometimes very stringent laws have been made against them. Thus in 1853, when the Pietistic party was very strong, a preacher of a Free (creedless) Church was stopped by the police because he had in his congregation children under fourteen years of age. He might preach to adults who adopted his opinions, but he must not teach children. In 1854 a school of a Free Church was shut up. All the children of the community must be educated either in the Evangelical or Roman Catholic confessions. More recently permission has been granted to dissenters to have schools of their own, but no dissenter can be a master in a public school.

The enactments of the Prussians, then, throw no light on this religious question. But the history of education in Prussia throws a great deal. There is, as I have said, every diversity of opinion within the

two Churches, and the different tendencies have had their fierce struggles. Frederick the Great was a tolerant monarch, and in his time great toleration was practised. But after his death a vigorous effort was made to stamp out the neology which had invaded the schools as well as the Church by the strictest tests. The successor of Frederick did not reign very long, and with a change of reign came a change of method in dealing with religion. Altenstein, the first Minister of Instruction, was a man of wide and liberal ideas; and during his time, from 1817 to 1840, there was great latitude of thought permitted in Church and school. He was succeeded by Eichhorn, a narrow bigot. But Eichhorn had come too late. Persecutions at a certain stage are the surest means of spreading the ideas which they are intended to repress. And Eichhorn, by his censures and dismissals of teachers, no doubt helped the movement which had begun in the ministry of Altenstein. This movement would well repay a detailed exposition, but I must indicate it in a few sentences. Through various circumstances, but especially through Pestalozzi, the teachers of Prussia had got new light on their vocation. They had come to feel that their special function was to draw out all the powers of the child into healthy, full activity. And in this they at once came into collision with the Church. The education of the Church aims at preparing the pupils for another world. The education of the teacher draws out all his powers in this. The Church is apt to look on the child as a lost and erring sheep who has to be gathered back into the

fold. The teachers of Prussia looked on the child as a wonderfully organised, healthy being, possessed of great powers which were capable of expansion. The Church wished to make the pupils believe its creed: the teachers threw the creed aside, treated the abstract as unfit for the nature of the child, and wished to saturate the child's mind with the love of truth and goodness by concrete examples. In a word, the teachers came to see that the functions of the Church and the School, though they might coincide at some points, yet were widely and essentially different. And they in strong and vigorous argument demanded that the School should be independent of the Church. They were an able, honest, and conscientious body of men, led by a man of wide culture and steady purpose, Diesterweg, a follower of Pestalozzi's. They had no great faith in the creeds of the Churches, but they were devoutly religious men. And with the deep earnestness which characterised them they permeated the minds of the children with their own ideas; they gave their whole energies to awaken intellectual life in their pupils, and that life was necessarily accompanied by a desire for freedom. The revolutions of 1848 burst upon the world. The German people had now a chance of speaking out their mind. The German Parliament met in Berlin. Among the first questions taken up was that of education.

Conferences of teachers, directors of seminaries, school counsellors, and others, were held, and the results were given in a scheme, in which it is said; "The public people's schools, as well as all other

public educational institutions, are under the inspection of their own officials, and are free from every ecclesiastical oversight." The National Assembly adopted this article in the following form: "The public people's schools, as well as all other public educational institutions, stand under the superintendence of their own officials named by the State. The direction of the external affairs of the people's school and the choice of teachers belong to the parish. The religious instruction is managed and superintended by the different religious societies." Diesterweg, who was a representative in the Assembly, was for a slightly different plan, by which the religious instruction should be removed from all control of the clergy, and placed entirely and absolutely in the hands of the teacher. This article of the National Assembly now mentioned was adopted in the constitution of December 5, 1848, and substantially also in the constitution of 1850, to which the king swore. But a reaction set in. The schoolmasters were blamed for the revolution. Diesterweg was cashiered. Political freedom and religious freedom seemed to go hand in hand, and they must both be stamped out. The king, it was said, had gone too far, and the people must be kept under. The Pietistic party took the side of despotism. The Government gave them full scope, and Stahl was allowed to use the civil power to extinguish all dissenters. The Ultramontanes also seized the opportunity. Pietism, Despotism, and Ultramontanism shook hands together, and the priests claimed and got large control over education. This period, from 1850 to 1872, is the dark period

in the history of Prussian education. The clerical and despotic reaction found its expression in the three *Regulativen* of 1854. The Minister of Education had resolved to put an end to religious aberrations and political aspirations by altering the mode of educating the young. And it deserves special notice that the method which he adopted to check the desires of the people for political and religious freedom was *cram*. The children were to commit to memory so many prayers, a large number of hymns, and a large number of passages from the Bible. The memory, above everything, was to be practised ; the child was to learn, whether he knew the meaning or not ; and the teacher was to adhere closely to his text-book. There was to be as little room as possible for the exercise of reason. In the training of teachers the utmost care was to be taken not to instruct them beyond a certain well-defined limit ; and they were forbidden to read Goethe and Schiller, "the so-called classical literature," because it might withdraw them from the Church life. In fact, for the first time the Prussian Minister had meddled with the minute details of school work ; and though the regulatives contained some sound principles, yet they were justly looked on by the teachers and liberal thinkers of Prussia as degrading the education of the country. On one point, however, all the Ministers of this period felt inclined to give way. The parish clergyman or priest, as we have seen, was the inspector of the parish people's school. An ecclesiastic was inspector of the schools of a circle. Both, indeed, were under officials, for the most part laymen, experienced schoolmen, who were bound by

no Church ties, and therefore they were controlled. Both were also expected to make themselves acquainted with the science and art of teaching. Yet still they were ecclesiastics, and the teachers urged, and the nation backed them, that the first requisite for the office of inspector should be that the person should be a practised and scientific teacher. The Ministers acknowledged this in the laws they projected. Even the late Minister, Mühler, whose ecclesiastical proclivities gave the nation great offence, lays it down that "the higher school inspection ought not to be connected exclusively or principally with ecclesiastical offices, but, above all things, should be placed in the hands of tried members of the scholastic profession (*bewährter Schulmänner*)."

Mühler, as you remember, had to retire, mainly owing to his unpopularity, but on the special occasion of interference with Joachim. The public demanded a liberal Minister of Education. The nation had been growing in strength. The Austrian war roused its spirit. The Franco-Prussian war made its demands irresistible. They were eager that an effort should be made to break their ecclesiastical bondage. They were eager that education should no longer vary according to the temper of the Minister, but that there should be one law for the whole of Prussia. Bismarck perceived the spirit of the nation, and he at once chose Falk as Minister of Religion, Instruction, and Medicine, in January 1872. Falk was born in Metschkau, near Striegau, in Silesia, in 1827. His father was Protestant pastor there, but removed, taking Falk with him, to Breslau. Falk studied law,

and had gained the esteem of Bismarck by his energy, his insight, and his decision. His accession to the ministry was hailed with delight, and his two years of office have already produced great results. One of his first acts was to claim for the State the entire superintendence of education. It was on this occasion that Bismarck made the speech in which he declared war against the Ultramontanes. The school was a State institution, and ought not to be subservient to any ecclesiastical power. In previous times there had been a wonderful peace between the different confessions in Prussia. Recent circumstances, notably the two wars, had put an end to this peace. And the State must decide the conflict. All inspectors of schools, whether clergymen or laymen, must act as servants of the State, not of the Church, and must be entirely under the control of the State. The Bill passed the House of Representatives, and was carried in the Herrenhaus after this speech of Bismarck's by 125 to 76. Immediately a great number of clergymen resigned their positions as local or circle inspectors. Accomplished schoolmen took their place, and at this present moment a revolution is thus quietly going on.

Soon after this Falk maintained Old Catholic teachers in their position against all the thunders of Pope and Archbishop.

Falk then dealt with the question of the regulations of 1854. You will take note of the method of procedure. First a conference was held of twenty persons, consisting of members of the House of Peers and House of Representatives, school counsellors,

directors of seminaries for teachers, one member of a local board, and one principal teacher of a *Volksschule*. They belonged to different parties. The conference lasted from 11th June 1872 to the 20th June. Then Dr. Schneider, who had been director of the Berlin Seminary for Teachers, and was and is now a member of the Supreme Council of Education, was asked to draw up a new series of regulations for the people's schools and for seminaries. These were discussed and adopted by Falk, and appeared on 15th October 1872. They abrogate the three regulatives of 1854, and all the later supplements, especially those of 19th November 1859 and 16th February 1861. And the spirit of them is entirely opposed to the narrowing influence of the regulatives. Special care is taken to urge that the memory be not over-loaded, that the children understand what they read, and that the teacher be not fettered in his methods. These regulations are creating a new era in Prussian education. The last of Falk's measures which I shall mention is a vigorous effort to get better salaries for the schoolmasters. The Prussian schoolmasters are very poorly paid; but the Government has always sympathised with them, and has often tried to ameliorate their worldly condition.

Keen agitation is still going on as to the religious question. Pamphlets are appearing every day on the relation of Church and State. The manifest tendency of them is to hasten the complete separation of the school from the Church, and as a consequence of this to leave the teaching of religion entirely to the parents and the churches. Pædagogic

reasons are again felt powerfully in this direction. "The moral influence of the teacher," says Eduard Zeller, the historian of Greek philosophy, in *Lectures on State and Church*, delivered in the University of Berlin, and published in 1873, "on his scholars is so little attached to a dogmatic confession, that on the contrary it must be marked out as a pædagogic demand of modern training to plant in them the moral feeling, the consciousness of right, and the sense of a universal love of man, independently of all dogmatic suppositions, and therefore independently of confessional limitation and intolerance." Dr. Fricke, in his prize essay on religious instruction, bases his arguments almost exclusively on pædagogic principles. Of course other reasons are adduced. "As the mingling," says Zeller, "of the population has made the confessional state an impossibility, so also will it make the confessional school even more and more impossible."

There is at present a society in Berlin which aims at thus freeing the school. And it may be presumed that, if the people are again allowed to express their feelings fully as in 1848, the same results will follow, and the religious instruction will be left to the religious communities. In addition to the feeling of the people, there is now the conviction of eminent statesmen that, since the balance of religious parties has been disturbed, this is the only practical way to escape from the difficulties which have arisen, and must continually arise.

While the question of religious education has not interfered with the success of the intellectual, we

find that the State has done its utmost for it. And here we must examine for a moment the Prussian idea of the State and its functions. The ancient Greeks and Romans had a stronger consciousness of the claims of society than of those of the individual. They saw that society lived for ever. The individual members died, but the society, the community, was ever renewed and ever continued. And the individual members derived their blessings and privileges from society. It was therefore the bounden duty of every individual to think first of the good of the community, to sacrifice his own wishes and pleasures for its welfare, and to submit to all restrictions which the general weal, the commonwealth, might impose. Existence in a State demands unselfishness. This ancient idea the Prussians have retained. The nation is a unity; the rulers are its head, its brains; and their work is to accomplish, through the machinery of the State, all that is best accomplished through that machinery. Education is one of these things. It is an object that owes its success to organisation. A good teacher cannot be extemporised. He must be systematically trained, and he must look on his profession as the work of his life. A good school must be supported by a regular and permanent source of income. Variability in this matter tends to defeat educational efforts; and if a whole people is to be educated, ample provision must be made for them in the matter of schools and teachers. If a nation, therefore, is to have good teachers, good schools, and a sufficient number of them, it must begin the preparation

of the teachers, and the erection of the schools, long before they will pay, and it must organise the whole into a unity. For these and many other reasons education cannot be satisfactorily given to a whole community except with a complete public organisation. This the Prussians have always acknowledged. They have always regarded education as specially the duty of the State. Proofs of this could be given innumerable. I shall quote from three writers. Beneke says : " The right of the State in respect of the school has been disputed by no one. It cannot be a matter of indifference to it in what way its future citizens are trained. As all other far-reaching interests, so also those connected with education and instruction are concentrated in it ; and as it has the duty to provide for the satisfaction of these, so must it also have the right of the chief establishment and superintendence of all institutions of education and instruction." " I understand," says Paul de Lagarde, a famous scholar and theologian of Göttingen, in a pamphlet on the relation of Church and State, published 1873—" I understand by the State the institution which seeks, at the expense of all, and with means presented by all, to attain to ends necessary for all, or even only desirable to all, but not attainable through the efforts of one or several individuals. Herewith it is granted that the State has to accomplish nothing which the individual or individuals can accomplish ; that it has to accomplish only what is necessary for all, and what by its nature can be accomplished only through the common effort of all ; that its right, might, and duty

go only so far as the universal necessity of the ends which it places for itself. The State ought to give the money of the nation entrusted to it only when it is convinced that that for which it gives out the money is, or can be, the common property of the nation. It is entitled, for instance, to give out money for the army, for schools, for canals, for roads, for forests, because all these objects are necessary to the national life; but a single member, or an association of single members, of it, cannot take care of these at all, or only imperfectly, and are also not bound to procure by private means what is for the good of all." In like manner Eduard Zeller, in the lectures already mentioned, remarks, "Society alone can form the institutions and provide for the means which all higher instruction requires, all the more the further science advances and spreads out into a multiplicity of single departments. From it alone can a suitable connected organisation and direction of the whole of education proceed. Its power alone is in a position to overcome the hindrances which the indifference, the folly, the selfishness of many parents put in the way of universal and vigorous education of youth. It is bound and entitled to make use of this power by regard to itself as well as to all belonging to it. . . . The State is bound, in looking after her own future, to secure her permanence and prosperity by instruction and education." You will notice that all these writers have in their minds the entire education of the country, the universities and *Gymnasien* as well as the people's schools, and this may be said to be nearly the unanimous opinion of all German thinkers.

The Prussian State has fully apprehended its duty in this matter. From the time of Frederick's father to the present day the rulers have sought to bring all the wisdom they could get to bear on this problem, limiting their action by only one consideration, the maintenance of loyalty to themselves. In fact this I consider to be one chief element in the success of the Prussian system, that the rulers have always sought for the men best skilled in the science and art of education to guide them in all educational legislation. And whatever else may be said of Prussian schemes of instruction, they bear on their face the fact that they have been formed by men practically and theoretically acquainted with education, and are eminently wise. Let me illustrate the action of the rulers according to this principle. Shortly before the time of Frederick the Great's father, a religious movement, what we should call a revival movement, broke out in Prussia. Spener was its leader. He had a pupil of the name of Francke. The Church at that time was sunk in a cold orthodoxy. It was the greatest sin not to believe every tittle of the creed, but it was no sin not to feel the love of God. Moral death hates life, and when the revival movement came it was met by stern opposition. Francke suffered persecution from the men of orthodoxy, simply because he had life in him, for in reality he was as orthodox as they were. But this Francke had the love of God in him, and the love of the poor, and the love of children, and so he established a school for the poor, and then a seminary for teachers, and various other institutions.

The king, Friedrich Wilhelm I., saw that he was doing a great and good work for his people. He gave him substantial aid, and consulted him when he issued laws for education. Francke thus became the real founder of the modern people's school. Francke had a pupil called Hecker, as pietistic and orthodox as himself, and as intent on doing great work. Frederick the Great was neither orthodox nor pietist. He had no belief in the great truths of Christianity, but he believed in Hecker. Hecker knew about education; Hecker was in earnest about education; and Frederick gave him full swing. He employed Hecker to organise education. It was Hecker that drew up his educational acts for him. These educational acts are really the foundation of the Prussian success. Hecker inserted compulsory clauses, though this was not new, as the doctrine had always existed in the Prussian mind. He insisted on teachers being trained for their profession. He tried to get the whole country interested in the maintenance of the teachers. He instituted seminaries for teachers, and he and Semler were the originators of the *Real-schule*. Frederick went so far as to allow Hecker to introduce his pietism into the act. The decree of the sceptical Frederick contains this clause: "As far as the work of the school is concerned, sacristans and schoolmasters are earnestly reminded above everything to prepare themselves for teaching by a heartfelt prayer for themselves, and to ask from the Giver of all good gifts wisdom and patience that their exertions and labours may be blessed. In particular they are to pray the

Lord that he would grant them a heart paternally inclined and tempered with love and seriousness towards the children entrusted to them, that they may discharge all the duties lying on them as teachers willingly and without grudge, remembering that they can accomplish nothing, not even gain the hearts of the children, without the divine aid of Jesus, the friend of children, and of His spirit."

The same determination to choose the best men for the Government offices pervades the Prussian system. The head of that system is the Minister of Instruction, always a man thoroughly versed in educational matters. He presides over a council of education, in which there are always two or three men who have had large experience in practical education, and who are profoundly acquainted with the science of *pædagogy*. It is the business of the Minister to form a clear idea of the aims which he wishes each class of schools to have before them. And, for this purpose, he asks one of his council, who is practically conversant with the science and art of teaching, to draw up general directions as to the aims, subjects, and best methods of teaching. This document is submitted to the council. The Minister listens to all that has to be said by men well acquainted with the political and ecclesiastical affairs of the country, makes up his mind as to the advice given, and then sends his directions to all persons concerned. These documents are of great value as expositions of educational practice, and show a rare amount of wisdom. They give unity and purpose to the whole education of Prussia.

But great care is taken not to interfere with details. The details are to be worked out by the various subordinate councils. The Universities are made to a large extent self-governing. The directors of *Gymnasien* have large powers, with much responsibility. And special work is assigned to each education board, in proportion as it is supposed capable of doing it. But no directly educational work is done by any one who is not specially prepared and fitted for it, and no board determines strictly educational matters without having the direction and advice of some one practically acquainted with education. There is always attached to the provincial board a special member called a school counsellor, who is appointed for his special knowledge of the art and science of education.

The schoolmaster himself is also looked on as an official of the State. His function is not merely to teach reading, writing, and other arts; but to make good citizens. Accordingly, it is demanded of him that he give his life to the work. He must submit to a preliminary course of training at a seminary or normal school; he must serve a kind of apprenticeship; he must pass certain examinations. And the boards are warned to be particularly strict in these examinations. It is thus very rare that an incompetent teacher finds his way into a school; and if such an event takes place, the board that let him pass is held responsible for the mistake, and is bound to get employment for him in some other branch of service for which he is better fitted. Once in a school, he is urged to make progress in

his career. A man who does not exert himself is sent to the schools where the lowest pay is given, and the mode of life is disagreeable. But if he works, he may rise to any extent. The only obstacle in his way is that many of the best educational situations are open only to those who have gone through the *Gymnasien* and the universities. But if he has this education, he may become the school counsellor and a member of the provincial board; he may become a director of a seminary; he may become a member of the chief board; he may become the Minister of Instruction himself. All the offices lie open to merit and loyalty. He is also secured a fixed salary and certain privileges. He may have a retiring allowance at a certain stage, and his widow and children will be cared for after his death. In fact, there is every inducement for him to apply his whole heart to his special work, to continue improving himself to the last, and to be loyal to a Government which, in no ordinary degree, sympathises with him in his somewhat hard and difficult vocation.

If the State is thus careful in providing for instruction, it expects the people to take it. Every child must be educated. No excuse is admissible, except the guarantee that the child is being instructed properly elsewhere. There are two essential duties which all owe to the State—service in war and attendance at school. The service in war is of recent date, owing its existence to the mind of Scharnhorst and the ravages of Napoleon. But the idea of compulsory attendance at school is found at all

periods of Prussian history. "I hold," says Luther, "that the authorities are bound to compel their subjects to keep their children at school." We find compulsion laid down in the educational decrees of 1717 and 1736. In the laws of Frederick the Great more precise directions are given. The parents and guardians are to pay the school-fees to the schoolmaster (double the school-fees in Silesia), just as if the children had been sent to school; and if all warnings fail to make them do their duty, the magistrates of the place can seize their goods. When, moreover, the visitor examined the school in his yearly visitation, he was to fine guilty parents sixteen groschen. In later times, retention of a child from school is punished first by a fine in money. If the parent refuses to pay the money, his goods are sold. If this fails, or if the parent has no goods to sell, the parent is put in prison for a short time. But inspectors, teachers, and local boards, are urged to use every means of persuasion before punishment is applied. The fees have always been small. In 1848, during the discussions which then took place, it was agreed that in the people's school no fees should be exacted, and the constitution of 1850, sworn to by the king, contains this clause, "In the public people's schools instruction is given free of charge." But this part of the constitution has never been carried into practice. If, however, the child's parents are too poor to pay the school-fee, the school-board pays it. Moreover, education opens up wide prospects to all Prussian citizens. If a pupil shows great capacity, there is

a free place for him in the gymnasium and university. There are ten free places on an average for every 100 pupils in a gymnasium. Every encouragement is given to ability. The Government aims at having all the ability of the country on its side and in its service.

The one question which has arisen in regard to the State's management is whether too much pains is not bestowed on making the poorer classes Prussian citizens, and too little on making them men. Now as in Church matters, so in State the science of teaching has roused a certain amount of antagonism. "We must make our scholars men," says the science of teaching. We must give them a knowledge of the history of other nations. We must bring out their human sympathies. And for this purpose we must get rid of the bureaucratic interference of State. The school must be a separate institution, independent to a large extent of Church and State, and governed by those only belonging to the scholastic profession. There is a society in Berlin, already mentioned, that aims at accomplishing this emancipation of school alike from State and from Church, and it ranks among its members some eminent men; but it is not likely to accomplish all that it wishes, though it may certainly do a great deal of good.

Last of all, the most influential cause that has led to the Prussian success is the wide appreciation of education. This appreciation did not always exist. Frederick's legislation was to some extent frustrated by the stinginess of the nobility, and partly by the opposition of those who doubted whether education

was good for the labouring classes. It is characteristic of Prussia that these obscurantists were not so much afraid for the men as for the women. What good can it do, they said, to teach girls to write? They will then spend their whole time in writing love-letters. But the case is now altered. Just ideas of education have permeated the people. These ideas have indeed come from above downwards. The Prussian management does not listen to any control from uneducated or half-educated men. But the Prussian Government claims the intelligent sympathy of all classes. And it has it. How is this? To explain this fully would require something like a history of the intellectual development of the Prussians during the last two centuries. But I shall attempt a short contribution to the explanation. The growth of a genuine German literature in the end of last century is remarkable in this respect: it was the result to a large extent of criticism. Lessing, the father of it, was by eminence a critic. He examined minutely the laws and limits of poetry, sculpture, and painting. He discussed the drama. He was a critic of the classics. He established principles of criticism. He worked by *vision*. It was the same with Herder. He was at home in all the phases of humanity. He gathered the ballads and legends of every nation. He sifted them, and drew out the human from them. This habit of looking into things brought the writers face to face with reality, and the width of their range opened up all the aspects of human nature. The classical studies of Wolf and a host of successors

had the same effect. They revealed and created a life different from the ecclesiastical one. They placed them at a widely different point of view. And, above all, they brought home to them the laws of evolution, as they appear in the progress of mankind. It was natural that, when the education of mankind was deeply pondered, the evolution of the single mind should arrest attention. And at length it did. This is not so easy a subject as we are apt to imagine. We have been infants, we have been boys, and therefore we think we know what infants and boys are. But do we? For two of our first years our minds were incessantly employed. Thousands of impressions were made on them. We felt thousands of joys and sorrows. And yet we cannot remember one of them. That early life is a mystery which we cannot recall, and which to a large extent we cannot fathom. The distance between our present life and that of boys is not so great: but still it is very great. Boys and men seem like; but they are in reality very unlike: the boy goes through many stages before he reaches manhood. What are these stages through which the boy goes? What is the natural healthy evolution of the powers of a boy's mind? These were the questions which Pestalozzi put to himself, and in answering them produced a revolution. "To be a teacher of children," said Luther, "you must become a child." And Pestalozzi became a child: with a heart glowing with love to his fellowmen, with singularly keen and lively sympathies, with an ardent affection for the poor, and with a rare con-

sciousness of his own weaknesses, he set himself to the work of teaching boys to become men. The problem, you see, is not to teach children to read or write. Books are but mere instruments. The child stands face to face with nature, man, and God. These are his real lesson-books. What is the alphabet of this instruction? What are the various stages? Pestalozzi pored over these problems: and he gave his answers. The answers spread over Europe. New light was thrown on education. The best minds in Prussia turned to the solution of the difficult problems; and the result was a universal interest among all cultivated people in education. And you may at once see why this interest should be great and pervasive in Germany. It was pressed upon the people by all their greatest minds. Look at German literature, and you will find this to be the case. Herder wrote specially on education. Goethe devoted a great deal of attention to it, and some of the most beautiful portions of the *Wilhelm Meister* are descriptions of his imaginary schools. Jean Paul flung out a noble book on education full of grand thoughts. In fact no German can be well acquainted with the best literature of his country without having to ponder the truest and wisest thoughts that have been uttered on education. The philosophers also took the subject up. Kant delivered lectures on the science of education. "Education," he says, "is the hardest and most difficult problem which can be proposed to man." Fichte addressed himself to the question in his speeches to the nation. And Hegel's *Phænomenologie* is so full

of the development of the child's mind, that Deinhart, Thaulow, and Rosenkranz, have issued Hegelian systems of education. The theologians, like Schleiermacher, also devoted themselves to an examination of it. And in particular the psychologists deemed it as a special portion of their department. Two of these, Beneke and Herbart, have given us a thoroughly scientific exposition of the whole subject. They analysed every process of the child's thought; they estimated the value of every subject of instruction; they discussed the relation of the intellectual to the emotional and practical; they investigated the nature of that interest which children feel in learning; they defined the purposes and aims of instruction; and they examined philosophically the various schemes for its organisation. The subject became a subject of scientific research. It found exponents in the Universities. There arose a *pædagogik* or science of instruction for all classes of schools. The *Gymnasien* shared in the movement. It was held out that the great object of the *Gymnasien* was to prepare the pupil for the search for truth. The Universities were the field for this search. Accordingly, there exists a keen desire to investigate. There are men whose only business it is to investigate. They examine without prejudice the principles which underlie education. Their examinations keep up fresh interest and give fresh life to the subject. This life distils through the seminaries for teachers. The future teachers are made acquainted with all the investigations that are going on. They have to think the subject out for them-

selves. They know that teaching is an art which acts according to the laws that regulate the evolution of the human mind. They watch these laws. Their eyes are open. Their interest is lively. They believe that they have a great and noble work to do. And their pupils also come to know that their teachers are artists; and hence the laws of education are extensively known in Germany. The consequence is that the people appreciate education, that they do not meddle with what only a practical and scientific knowledge can direct, and they demand of all their instructors a minute investigation into the laws of man's being. The educator is with them not a mere crammer; but all feel that his first and great duty is the harmonious and equable evolution of the human powers. This appreciation of education seems to me the great secret of the Prussian success. It leads to an earnest determination on the part of the Government that the education be thorough, and every effort of the Government is backed up by the hearty sympathy and intelligent co-operation of the people.

We have to add to this appreciation of education the circumstance that Prussia has had to force its way upwards. It has always been ambitious; and it has always aimed at attaining the object of its ambition through the education of the whole people, especially, indeed, through the higher education, but also through the lower. The State has felt in regard to its prosperity what Luther felt in regard to the Church. "It is difficult," he says, "to make old dogs obedient and old scoundrels pious—the work at which the

preacher labours and must often labour in vain ; but the young trees can be more easily bent and trained." It is in the youth that the State of Prussia has placed its hope. Frederick the Great was beset by Russians, Austrians, and French : he was reduced to the lowest depths sometimes, and his kingdom was exhausted. How did he think of reviving it ? The first thing he did after the Seven Years' War was ended, even before the peace of Hubertsberg was ratified, was to promulgate an admirable education Act—the Act, as I have said, of Hecker. Again, when the State was overrun by Napoleon, to what did Frederick William III. and his minister Stein turn ? "Unquestionably we have lost in territory," said the king ; "unquestionably the State has sunk in external might and glory, but we will and must take care that we gain in internal might and internal glory ; and therefore it is my earnest desire that the greatest attention be devoted to the education of the people." Again he says, "I am thoroughly convinced that for the success of all that the State aims at accomplishing by its entire constitution, legislation, and administration, the first foundation must be laid in the youth of the people, and that at the same time a good education of the youth is the surest way to promote the internal and external welfare of the individual citizens." "Most," said Stein, in 1808, "is to be expected from the education and instruction of the youth. If by a method based on the nature of the mind every power of the soul be unfolded, and every crude principle of life be stirred up and nourished, if all one-sided culture be avoided, and if

the impulses (hitherto often neglected with great indifference), on which the strength and worth of man rest, be carefully attended to, then we may hope to see a race physically and morally powerful grow up, and a better future dawn upon us." The method to which Stein here alludes was the method of Pestalozzi. Stein characterises this method as one "which elevates the self-activity of the spirit, awakens the sense of religion and all the nobler feelings of man; promotes the ideal life, and lessens and opposes a life of mere pleasure." These words of the king and his minister rang through the nation. The idea seized them. It permeated all the legislative measures of Altenstein, the Minister of Education, and it worked mighty results. It was within the twenty-three years of Altenstein's ministry that Prussia made such progress in education that she became an object of admiration to the nations of Europe, and Frenchmen and Englishmen went to see the system. And by it Prussia grew in strength and power. The Prussian people have had faith in education. They believed with Kant that "behind education lies hid the great secret of the perfection of human nature." They believed with Fichte that "only that nation which shall first perform the task of educating up to perfect manhood by actual practice will perform the task of the perfect State." They believed that education makes better citizens, better soldiers, better fathers, and better men. And history records, in great successes in war, and still greater successes in the realms of thought and science, that her faith has not been in vain.

## LECTURE II.

### HISTORY OF EDUCATION IN ENGLAND.\*

Present State of Primary Education—Causes—Want of Appreciation proved by a glance at the state of higher Schools and Universities—Character of the English mind—History of Education in England—Robert Raikes—Lancaster—Bell—Brougham—Lord Althorp's Grant—Establishment of Committee of the Privy Council—The Church Triumphant—The Function of the State in Education—Coleridge—Gladstone—Adam Smith and John Stuart Mill—The Church of England—British and Foreign School Society—The Party that thought the Family and Church should teach Religion—Dr. Hook—Dr. Chalmers—The Voluntaries—Dr. Vaughan—Sir James Kay Shuttleworth—Lord John Russell—Mr. Lowe—The Revised Code : Educationally considered ; Financially considered—The Constitution of the Committee—Mr. Forster's Act—Remedies for the Present State.

THE subject of my lecture this evening is the History of Education in England. I use the term England in its restricted sense, as excluding Scotland. It is somewhat difficult to get at exact

\* The most important works on English education known to me are the two volumes published by Sir James Kay Shuttleworth, on "Public Education," 1853, and "Four Periods of Public Education," 1862, and his pamphlet on the Revised Code, "Memorandum on Popular Education," 1868. Notice should be taken also of Ernest Wagner's "*Volkschulwesen in England*:" Stuttgart, 1864.

statistics in English education. The plan generally followed in this country with educational reforms is to propose a commission. The commission examines a great number of people and a great number of facts. It records this evidence in blue-books, and it reports on the evidence, generally urging some changes. Almost nobody reads the blue-books. The recommendations are generally rejected, but some new measure is proposed, said to be based on the evidence. This measure is sure to be modified, both in the House of Commons and the House of Lords, and then *may* be passed, but generally is not. It is in these huge blue-books that we should expect accurate statistics, but we scarcely ever get them. Something has been neglected in the consideration. Still, they contain a great amount of information; and they have now embraced the whole of English education. In 1861 appeared six volumes on primary education; in 1864 four folio volumes on what are called the Nine Public Schools of England—Eton, Harrow, Rugby, and the like; in 1868 appeared twenty volumes octavo of a report by commissioners into all schools not included in the two previous reports. The Universities of Oxford and Cambridge have also again and again been examined by commissions appointed to inquire into certain reforms which were deemed necessary. These are only a few of the reports that have been issued. Reporting and getting statistics have been going on since 1816 almost without an interruption. And besides these, every year the Privy Council Committee issue a report of what has been done in the

course of the year. It is from these documents mainly that we gather information in regard to the state and progress of education in England; but all statistics are to be taken with caution.

I begin my survey of the history of education in England, as I did that of Prussia, by a slight notice of the present state of primary education. I can get no accurate statistics as to the supply of education, but I get the following approximations. Under the Act of 1870 inquiry has been made into school accommodation. Of 8551 parishes examined up to 31st May 1873, 3465 had a sufficient supply; in 5086 the supply was deficient. In London the ordinary methods of calculation would give a deficiency of 252,000 places. After a minute house-to-house investigation, the London School Board came to the conclusion that the number of school places ultimately required will be *only* about 112,000. The population of England for 1872 is estimated at 23,067,835. Of these about a sixth is reckoned to be of school age, say 3,800,000. In Government-aided schools there is for 1872 an average attendance of 1,338,158; and in schools simply inspected there are 54,124; in all there are 1,392,282 of the 3,800,000 in Government schools of any kind. Of course there is a large number receiving higher education; there are some who are sickly; there is a very large mass somewhat irregular in attendance; for the number present at examination in State-aided schools is higher than the average attendance, being 1,607,511. And there must be a large number in other primary schools than the State-aided.~ But,

make what allowance we like, there must be a fearful number of children receiving no education at all.

Let us now look at the results of the teaching. Now here again we can form no idea of what real education is given. Government undertakes to examine only in subjects. It does not ask whether the pupils are being trained to citizenship. It prescribes no aim for the schoolmaster to set before him. And even in subjects, it asked him up till last year to teach only the crafts of reading, writing, and ciphering. All information, therefore, as to the real evolution of the powers of the mind, or as to the growth of intelligence, is not to be got. But we turn to the highest standard. This standard is as follows:—(1) In reading, to read with fluency and expression; (2) In writing, a short theme or letter, or an easy paraphrase; and (3) In arithmetic, proportion and fractions (vulgar and decimal). This is surely a small amount of accomplishment to ask from a well-educated citizen. The scholar in Prussia must pass an examination in all this, and in geography, history, natural history, singing, and drawing, before he gets his billet of exemption from the school; and, as we have seen, nearly all the children succeed in getting it. How many are there who succeed in England in the sixth standard? There ought to be 3,800,000 children at school. Strike off 800,000 for children of the higher classes, the sick, etc. Prussia's accurate statistics strike off 500,000 for 3,500,000. Then how many of the 3,000,000 pass the standard? Of course as the 3,000,000 are at various stages, there is only a

proportion of these at the age fit for passing. Suppose we divide by ten, and put down 300,000 as the number that ought to be fit to pass, and let us compare this with the actual number. For examination in the sixth standard in 1872, 15,031 presented themselves. Of these 13,795 passed in reading, 11,276 passed in writing, and 8819 passed in arithmetic. Not one in twenty. Put beside these facts that these advanced scholars come out of 9854 schools, with 14,771 certificated teachers, and 21,297 pupil-teachers, and you find that you require one teacher and one and a half pupil-teacher combined to produce annually one scholar that can pass the sixth standard in reading—to read a passage with ease and fluency. Here is surely an enormous failure. I told you that the statistics were not to be trusted. We have no guarantee that these are all the scholars that could have passed the sixth standard. The Government arrangements are such that it is a positive advantage in many cases for a schoolmaster to keep his scholars back. He has a strong motive not to ask a pupil to pass in Standard II., however clever he be and fit for it, until he has passed in Standard I., and as he moves only one standard each year, there is a strong probability that many of the pupils will never reach examination in Standard VI. But even if we take this and other circumstances into consideration, yet still a very ugly fact remains behind. Education in England is fearfully deficient, both in quantity and quality.

And we now turn to the history of education, to see if we can find the reasons for this failure. What

we notice first, and what must stand as the great cause, is a low appreciation of the value of education, and an ignorance of its great laws. I need not prove to you that this ignorance exists in the lower classes; but the statement is true of a large portion of the middle and higher classes. In a Prussian circle of cultivated men anywhere you will find that they have a clear perception of the best methods of education. They know at once the aims and the means of educating. But it is totally different in English society. You hear theories broached in the science of education as wild as the Ptolemaic in astronomy; you find sanction given to the most absurd quackery. You find public men speak on the subject as if there were no science of education, as if there were no laws in mental phenomena, and as if it were a matter of no consequence whether there was a science or not.

This state of affairs is evidenced by our literature. Milton wrote a short treatise on education; Locke, a treatise somewhat longer; but, except these two, there are no great English writers who have dealt with this subject. English divines have neglected it; the philosophers are too intent on solving the insoluble to condescend to such simple matters; the psychologists have only nibbled at it. There is no great work on the subject. There has been no great enthusiasm for education. There has been no mighty stir, and there is little faith in it.

One of the most powerful causes and symptoms of this is the low state of the higher education in England. The very object of a higher education is

to produce a passionate love of truth, and a power to investigate it. But this love of truth is not the aim nor the product of the middle-class schools or of the universities. They do not aim at producing intellectual power, or, if they do, they have failed as notably as the primary education has failed.

Let us glance into these blue-books which I have mentioned, that we may form something like an idea of the average result.

We take up first the Report on the Private and the Endowed Schools. We begin with the private schools. "In Norfolk," says Mr. Hammond, "social considerations outweigh educational considerations in the eyes of parents of all grades. Thus all local private schools are class schools." And what is true of Norfolk is true of all the other counties of England. "The head-master of a private school," says the Report, "is often a man of ability; the assistant master rarely." "The majority," says Mr. Bryce, "are deficient in every way, half educated, without any knowledge of teaching, without the force of character to rule and guide boys." "Sometimes," says Mr. Green, "they are little more than lads; otherwise they are of ignorant or questionable character. In my examinations I not unfrequently found them fragrant of alcohol." And so report all the other commissioners.

Let us look at the endowed grammar-schools. Mr. Fitch says "Three-fourths of the scholars whom I have examined in endowed schools, if tested by the usual standards appropriate to boys of similar age under the Revised Code, would fail to pass the

examination, either in arithmetic or any other elementary subject." Of classical learning, he says that it is so taught in the majority of cases that it literally comes to nothing. But "it furnishes the pretext for the neglect of all other useful learning." So say the other commissioners. There were some creditable exceptions. But the general result was utterly unsatisfactory. And the Report accounts for it by stating, "Untrained teachers and bad methods of teaching, uninspected work by workmen without adequate motive, unrevised or ill-revised statutes, and the complete absence of all organisation of schools in relation to one another, could hardly lead to any other result."

There are 700 endowed grammar schools, and most of them were intended to fit boys for the universities. But 550 at present send no pupils to the universities. Yet the grammar schools, with some proprietary schools, have almost a monopoly of the highest school education.

In many of these schools we have a phase of English educational life which throws light on our subject. At Skipton (endowment, £651) the head-master had appointed his nephew and his son to the second and third masterships; and Mr. Fitch "found the discipline most inefficient, and the instruction slovenly, unmethodical, and unintelligent. There was no one subject which had been taught with average care or success." At Bosworth (net income of school, £792 a year) the head-master taught three boarders, and no more. The under master only attended when he chose. The usher taught an inferior village school.

Thame had two masters receiving £300 between them, one of whom had a good house also. Mr. Fearon found one boy in the school." "At Witney, the head-master contented himself with teaching Greek to one boy." "At Whitgift's Hospital, Croydon, the late master (Mr. Fearon was informed) found no pupils attending the school when he came, and never had any at all during the thirty odd years that he was master." These extracts might be indefinitely extended. You can form some idea from these of the enthusiasm with which some English teachers exercised their profession; and you will note this fact with emphasis that these schoolmasters and the patrons of these schools would have thought themselves outrageously plundered if they were not allowed to do with the endowment as they liked.

The results of the commission on the nine public schools are given thus:—

"That boys who have capacity and industry enough to work for distinction are, on the whole, well taught in the article of classical scholarship at the public schools; but that they occasionally show a want of accuracy in elementary knowledge, either from not having been well grounded, or from having been suffered to forget what they have learned.

"That the average of classical knowledge among young men leaving school for college is low.

"That in arithmetic and mathematics, in general information and in English, the average is lower still, but is improving.

"That of the time spent at school by the generality of boys much is absolutely thrown away as regards

intellectual progress, either from inefficient teaching, from the continued teaching of subjects in which they cannot advance, or from idleness, or from a combination of these causes.

"That in arithmetic and mathematics the public schools are specially defective; and that this observation is not to be confined to any particular class of boys."

These statements are very indefinite, but give us an insight into the real state of matters. Their indefiniteness is owing to the circumstance that the head-masters of the schools refused to allow the commissioners to examine the schools—a fact which speaks for itself. If we try to come nearer the true state of the case, we get it from the reports of those who see the young men when they come to Oxford or Cambridge. "Five-sixths," says Mr. Riddell, tutor of Balliol College, "of the pupil-teachers in schools receiving aid from Government are better *readers* than five-sixths of the men who come to the university. Again, in one of the examinations in *Litteris Humanioribus*, in which I was an examiner, nearly half of the pass-men who came under my notice were imperfect spellers." These extracts could be multiplied indefinitely. If we had time to go to the bottom of this singular phenomenon, the body of evidence would furnish ample material. At present I can note only two points bearing directly on my purpose. These schools are monastic boyish institutions. In such places the popular opinion of the boys is all-powerful. There is no world of older people to modify it. What is that

opinion? Mr. Mitchell, a young Oxford student lately from Eton, on being examined, said, "A boy has no chance of becoming one of the leading boys by work. If he can do anything else, if he can row or play cricket, or any other athletic game, I do not think he is *thought the worse* of for reading." In fact, intellectual eminence counts for nothing in itself, and those who work, but do not distinguish themselves in play, are in low repute. Such is the opinion of the boys. What is the opinion of the parents? Testimony is borne that many of them lay no stress on the intellectual development of their children, but that their real object in sending them to school is merely or chiefly that they should make advantageous acquaintances and gain a knowledge of the world.

If we turn now to the universities, we shall find a similar state of matters. The young men remain at the public schools till nineteen. Nineteen is the average age of those entering Oxford. Hear what Dr. Mark Pattison, Rector of Lincoln College, Oxford, says in his *Suggestions on Academical Organisation* (pp. 230, 231)—"We must not close our eyes to the fact that the honour students are the only students who are undergoing any educational process which it can be considered as a function of a university either to impart or to exact, the only students who are at all within the scope of the scientific apparatus and arrangements of an academical body. This class of students cannot be estimated at more than 30 per cent of the whole number frequenting the university. The remaining 70

per cent not only furnish from among them all the idleness and extravagance which is become a by-word throughout the country, but cannot be considered to be even nominally pursuing any course of university studies at all. For the pass-man, the university is but an unmeaning repetition of the school."

That is 70 per cent of those who go to Oxford fail to do the work proper to a university.

Dr. Pattison's work expounds the causes of this sad state of affairs; but our time does not permit us to go more minutely into the subject. But one phase of the case has special interest for us. He attributes a good deal of the idleness to infection; infection from an aristocratic college (p. 241). "Spoiled by the luxury of home and early habits of self-indulgence, the young aristocrat has lost the power of commanding the attention, and is not only indisposed for but incapable of work. Profound idleness and luxuriousness have corrupted his nature. He is no longer capable of being attuned to anything. He is either the foppish exquisite of the drawing-room, or the barbarised athlete of the arena, and beyond these spheres all life is to him a blank. Congregated mostly in one college, they maintain in it a tone of contempt for study, and a taste for boyish extravagance and dissipation, which infects the moral atmosphere far beyond their own circle."

Even those who work for honours, though they often do splendid work, are not led in the right course. The endowments of the two universities are enormous; probably about £500,000 a year. A large portion of this goes as prizes. A student

works hard; he passes well; and as a reward he receives a fellowship, that is, he gets £250 or £300 for life, because he has succeeded in a kind of competition to which only a school-boy should be subjected. No effort is made to bring out original power in gaining the prize, and he has to do no work for it afterwards. It is for school-boy work, often for mere efforts of memory, that this enormous prize is given. And the result is that scholarship is often turned into a trade, and valued only for the pecuniary rewards which lie open to success. After the prize has been gained intellectual exertion is apt to cease. So says Professor Seeley in regard to Cambridge, in his essay on *Liberal Education in Universities*. Dr. Mark Pattison (p. 294) says of the training of the honour students at Oxford, "Its highest outcome is the 'able editor,' who, under protection of the anonymous press, instructs the public upon all that concerns their highest interests, with a dogmatism and assurance proportioned to his utter ignorance of the subject he is assuming to teach. In the schools of Oxford is now taught in perfection the art of writing 'leading articles.'"

I have now given you some idea of the intellectual training of three-fourths of the middle and upper classes of English society, of the men who were to be school managers, clergymen, country gentlemen, and legislators. But I have to add to this that most of these institutions, with their magnificent endowments, and all this superior training, were confined to members of the English Church. The Dissen-

ters were religiously excluded. They had to seek their education in private or proprietary schools; in University College, London, or the Scotch universities. In fact, they had to seek it under great difficulties, and, as might be expected, very many did not seek it at all. I have to add still further, that while the Dissenters were excluded by their religion, all the girls of the middle and upper classes were excluded by their sex; and the education of those who give the first bent to the mind, and exercise the most powerful influence on it, has as yet received only the slightest attention from commissioners, and none from Parliament.

Now the question comes, What could be the attitude of these men, thus trained, towards popular education? They did not believe in education. It had been to them a matter of mere routine, and a sham. They had got on admirably without it. In fact, they were, in their own eyes, better without it. They had patriotically adopted the opinions of their forefathers. The men of progress, the believers in the march of mind, seemed to them mere disturbers of their time-honoured beliefs. Men who get their opinions without reason are generally the most obstinate in resisting all reasonable arguments. Men thus educated become a firm, impenetrable mass of obstinate dogmatism, intolerant of others, and highly pleased with themselves. And certainly there is one thing that they will never long for—the introduction of more light. They secretly dread it. They may speak much of the benefits of education to popular audiences, but practically they have no belief in it.

And therefore it is that, if the middle and upper classes are badly educated, it is impossible to expect a good and effective system of popular education. The one is an absolute condition of the other; and while this is so, even in countries where the wisest men are allowed to legislate for the ignorant, it is more palpably so in a country like England, where the ignorance of the masses can often control the intelligence of the more educated. Even as far back as 1828, Coleridge remarked—"I am greatly deceived if one preliminary to an efficient education of the labouring classes be not the recurrence to a more manly discipline of the intellect on the part of the learned themselves; in short, a thorough re-casting of the moulds in which the minds of our gentry, the characters of our landowners, magistrates, and senators, are to receive their shape and fashion." There are some signs of a change for the better. Men like Pattison, Jowett, Seeley, and Farrar, are doing their best, and recent legislation has done a great deal; but the mass which has to be moved is possessed of an incalculable amount of inertia.

We have to add to this another consideration before we can understand the history of education in England. In every man's nature there is a three-fold capability for truth, for beauty, and for goodness. These are always combined in nature, and they are also combined in man's soul. But in man one of them may become more largely developed than the others. Now it is the end of intellectual education to produce a passionate love of truth, of the education of the feelings to produce a passionate love of

beauty, and of the practical power to produce a passionate love of goodness. But it is plain to one who reflects on the matter that the passionate love of truth is essential to a noble and real love of the beautiful and the good. Man is sure to be perverted by traditional opinions, by current modes of feeling, by strong personal bias, if he is not permeated with a love of the real, of the eternal, of that which beneath the surface of things lies as the eternal foundation of all the changing appearances of time. Now the English mind is unquestionably more attracted by the practical side of affairs than to the search for truth or the search for the beautiful. The Englishman wishes to *do* something. Hence his interest in politics, in religion, in money-making. Hence his mind is filled with these. And there is a law of mind of wide prevalence, that, if subjects occupy great space in the mind, they continually come up; they bulk large, however great or however little be their intrinsic worthiness. It cannot be said that the average Englishman has any passionate love of the search for truth; that he is at all much influenced by ideas. The goodness which he aims at is a goodness defined to him by tradition. The religion which he accepts is in the main the religion of his ancestors. These occupy a great space in his soul. They start up at every step. They become dear to him as his own life. And thence it has happened that when educational reforms of mbeen proposed he does not go back to inquire speak'pd has intended the education of a child to audience are the aims which the instructor has to

set before him; what is meant by human culture; what is the meaning of human life itself. He falls back into no face-to-face encounter with nature. He grapples with no profound question as to the evolution of man's faculties, and the vocation and destiny of man. He believes education to consist in reading, writing, and arithmetic, for the lower classes, with a little geography and history, it may be; and Latin and Greek and mathematics for the upper classes. And when a movement is made to improve such education, he at once asks, How will the movement affect my Church, and how will it affect my pocket? Not education at all; not the harmonious and equable evolution of human powers; not the building up of noble and beautiful human beings—these are not the questions which turn up in the history of English education; but the religious and monetary aspect of the matter, accompanied always with a great deal of kind-heartedness, a wish to do mankind good, but with no very definite idea of what doing good to man is.

We may now proceed to our sketch of the history of popular education in England. We have not to go very far back. The instruction of the people was committed to the Church at the time of the Reformation, but the Church of England entirely neglected this work. No system of education was established at the Reformation, no schools were set up for the masses. Nothing important was done for them by any one until Robert Raikes, a Baptist, originated, or at any rate established, Sunday schools in 1780. A large number of the poor began to receive some

instruction in these. At the time of the French Revolution all Europe was moved with the new ideas, and most prominent among these ideas were the necessity and duty of educating the masses. But England was the only country in which no great movement took place. At first there was considerable sympathy, and then considerable alarm. But England remained firm and secure; and the storm passed over, leaving her almost in the same position as she was before. It was, however, about this time that a slight stir began to take place, which may be said to be the first effort to create a regular education for the masses. A young lad of the name of Lancaster set up a school in London. He was animated by the English love of practical goodness. At the age of fourteen he was seized with a desire to teach the black slaves of Jamaica to read, and for this purpose ran off from his parents, but was in due time sent back by the captain of the ship in which he had taken refuge. This same enthusiasm for doing good found a better vent in London. At the age of eighteen he began to teach the poor in London. He had ninety pupils at first. Soon the numbers increased. He had to procure a large school-room. He admitted a great number free, and so his school soon came to have 1000 pupils within its walls. To teach so many was the problem that lay before him, and he accomplished the task to his own satisfaction. Crowds flocked to see this performance: one master with a thousand scholars. It seemed to solve the question of education. If one master could teach a thousand

children at once, there was some prospect that English children might be taught. People would subscribe on these conditions. And they subscribed. The king subscribed; the members of the Royal family subscribed; many of the nobility subscribed; and with special devotion the Duke of Bedford and Lord Somerville helped Lancaster. Lancasterian schools were established in every city. But Joseph was not wise in his management of money. And so a committee had to take this part of the business. In 1808 a society was formed for this purpose; and out of this society, called the Lancasterian Institution, gradually arose the British and Foreign Society, this name being given to it in 1814. Now what were the two special features of Lancaster's scheme? First it was cheap. That is the prime recommendation. One thousand boys could be taught reading, writing, and arithmetic, for £210 : 17 : 4, as follows :—

|  |   |   |       |    |   |
|--|---|---|-------|----|---|
| 1000 Slates at 4d. each                              | . | . | £16   | 13 | 4 |
| 1 Spelling Book                                      | . | . | 0     | 8  | 0 |
| Reading Lessons                                      | . | . | 0     | 12 | 0 |
| Arithmetical Lessons                                 | . | . | 0     | 14 | 0 |
| Rewards for children, slate pencils, and incidentals | . | . | 35    | 0  | 0 |
| Master's Salary                                      | . | . | 105   | 0  | 0 |
| Rent of School-room                                  | . | . | 52    | 10 | 0 |
|  |   |   | <hr/> |    |   |
|  |   |   | £210  | 17 | 4 |

for 1000 children, a little more than four shillings each child.

The other feature of this scheme was, that boys should be employed to teach boys—what is called

the monitorial system. This system ignores altogether the fact that the work of the teacher is to evolve the powers of the mind, and that for this work a wise and cultivated mind is required. In Prussia none but regular teachers are allowed to teach; there are neither monitors nor pupil-teachers; and on several occasions, when the local boards attempted to introduce assistants, the authorities informed them that if the assistant was able to do the work of a regular teacher he must receive the full salary of a regular teacher, or if he was unfit he must be dismissed. A harmonious evolution of a human being is in Prussia a very important and difficult task; but in Lancaster's eyes it could be done quite well by a boy; and one of the most ingenious features of his scheme was a plan by which boys who did not know arithmetic at all themselves could teach it to others. In fact, Lancaster himself was not an educated man in the strict sense of the term. Lancaster confined his secular instructions to reading, writing, and arithmetic; and there is no saying that his method might not have gained the approbation of the whole nation, had he not united religious instruction with it. All agreed that there should be religious instruction; but then who was to settle what that religious instruction should be? Lancaster thought that he had solved the problem by being as liberal as he could. "And lastly," he says, in his account of his plan, "while Joseph Lancaster is anxious to lay the foundation of religious and moral principles in the youthful mind, he studiously avoids introducing controverted theological points, and in short, every-

*thing which is peculiar to any sect or party.* The Holy Scriptures is the only religious book taught in the school, for here, as Sir W. Jones expresses it, we have 'purer morality than can be collected from any other book in any language;' or, as Locke has well observed, 'a volume which has God for its author, salvation for its end, and truth without any mixture of error for its subject.'" At this time in England there was not much spiritual life or deep religious feeling. But there were the attitudes inherited from previous generations. In the English Church were prominently two classes: those of a large and liberal mind, who believed that the Church of England had nothing to fear from the improvement of the people, who hailed any genuine advance which could be made, and who thought that the Church of England should change with the changing thoughts of the nation. These gave Lancaster their strong and hearty support. There were others, however, who, without having any conscious notion of their opinions, believed that the Church of England was perfect, that all its forms must be maintained in integrity, that its existence very much depended on the able support which they could give to it, and that by this support they were at once saving Church and State from the ruin with which Dissenters threatened it.

To this last class belonged a lady of the name of Mrs. Trimmer, and in some respects also Dr. Bell, a Scotsman, of St. Andrews, who, by acting as chaplain, and occasional lecturing in India, made £25,935, 16s. 5d. in nine years. Dr. Bell had in Madras adopted

something like the monitorial system. In 1796 he left India for England. \* Lancaster commenced his school in 1798, and his name had become widely known in 1801 or 1802. Bell saw Lancaster, and they talked and fraternised. At this time there was no jealousy; but Mrs. Trimmer had come to the conclusion that reading the Bible, and the Bible alone, was likely to be injurious to the interests of the Church. "From the time, sir," she wrote to Dr. Bell, "that I read Mr. Joseph Lancaster's 'Improvements in Education' in the first edition, I conceived an idea that there was something in his plan that was inimical to the interests of the Established Church." And then she adds with delightful innocence: "And when I read your 'Experiment in Education,' I plainly perceived he had been building on your foundation." In fact Mrs. Trimmer was dreadfully alarmed. She calls Lancaster a Goliath of schismatics. The education of the common people seemed to be slipping out of the Church into the hands of this Quaker. And such a Quaker! "It is a curious fact," says Mrs. Trimmer in another delightful letter, "that he was not originally a Quaker, but an Anabaptist. Whether he changed for the love of a pretty Quaker whom he married, or whether the broad brim was the best cover for his scheme, I cannot say." Mrs. Trimmer converted Dr.

\* Dr. Bell had two strong passions—for money and for education—and devoted his life to the accumulation of the one and the spread of the other. Shortly before his death he handed over £120,000 to be devoted to education, and his money is still actively employed in the work for which he intended it.

Bell. The alarm which she sounded spread over the length and breadth of the land. And soon the country was divided into two great parties, the Lancasterians and the Bible, and the Bible only, and the followers of Bell and the Church of England in danger. The great purpose of education was entirely lost sight of. Every term of abuse was heaped upon Lancaster. Southey and Coleridge and the *Quarterly Review* denounced him and his system; but they had their match in Sydney Smith and Brougham and the other writers of the *Edinburgh Review*. Out of all this hubbub and confusion arose a society for establishing schools in connection with the Church of England, and on Bell's system, called the National Society. It was first formed in doubt. The vast majority of those in the Church of England who were not liberal enough to aid Lancaster were of opinion that it was not wise to educate the common people at all. They thought that education had a tendency to make them discontented with their lot, to alienate them from the Church, and to render them refractory subjects. And when the matter was brought before Parliament, and the Parochial Schools Bill was introduced in 1807 by Mr. Whitbread, this party was triumphant enough to defeat active measures being taken. Several speakers of this party stated that they did not object to reading, but they saw no necessity for writing and arithmetic. Mr. Windham made an elaborate speech against educating the working classes, and clenched his refutation of the argument adduced from the intelligence of the Scotch by a story of an old

woman, who, on seeing a man going to be hanged for forgery, said, "See what comes of your writing and reading." The bill, however, passed in the House of Commons, but was thrown out in the Lords, the Lord Chancellor and the Archbishop of Canterbury heading the opposition. Dr. Bell was at first inclined to go with this opposition party, and incautiously stated that he thought the people ought to be instructed only in reading and writing. And when the National Society was formed, it was intended to confine the instruction to the reading of the Church Catechism and similar works. The National Society has taken gigantic strides since that time. The subsequent action of Government has been highly favourable to its extension, and the National Society has now by far the largest number of schools under its control.

This is the first fit in the history of English education. We come to the next in 1816; and it is entirely an effort on the part of Brougham. Brougham was at that time in the vigour of his powers, and, like a young Hercules, he went forth to slay the hydra of ignorance. He got a commission to inquire into the state of the lower orders in London. He soon was able to embrace within the scope of this inquiry all the educational endowments of England. He was determined to face the entire education of the country, from the highest to the lowest. The inquiry went on vigorously. An attempt to penetrate the depths of London was made. School managers and schoolmasters of the highest and lowest classes of schools were examined, and a

report was prepared. It was ascertained that there were 120,000 children totally destitute of education in London, that the sum of charity endowments was enormous, and that the abuses were manifest and glaring. Some proposals were made to employ these funds for useful purposes, and to deal with the education of the lower classes. Among these proposals was a conscience clause, "to provide that the children of sectaries shall not be compelled to learn any catechism, or attend any church, other than those of the parents." How were these proposals received? A wild and furious storm of abuse burst upon the head of Brougham and his projects. The upper classes were in arms against him. What business had he to meddle with money which no one had interfered with before? They denied the most flagrant abuses. Were there not also visitors, bishops, and even archbishops, among them, to look after the charitable endowments? and was it not infringing their rights, and censuring their conduct, to meddle with the matter? The opposition to the scheme for dealing with the education of the working classes was as violent, if not as personal, as the other. Brougham stated in one of his speeches on the subject that there was now no dread of educating the working classes, but he soon found that he was mistaken. There was the same dread as before. The dread, indeed, was not expressed in words, but formed a powerful reason for dogged resistance. Besides, the proposals were too favourable to the sectaries, and so the contest raged wildly and furiously, till a change of ministry took place, and

Brougham's committee was dissolved. But Brougham persevered, and in 1820 introduced a bill establishing a school in every parish. This time too much power was given to the Established Church. The Dissenters and Roman Catholics were up in arms, and again religious differences frustrated a noble plan. The bill disappeared amid the excitement of Queen Caroline's trial.

Baffled in Parliament, Brougham did everything he could to stimulate private societies to spread information. He helped in establishing infant schools, mechanics' institutes, the society for the diffusion of useful knowledge, and, finally, the London University. "Brougham," says Schmidt, the historian of *pædagogoy*, "with his eminent abilities, first brought life into the benumbed English education."

We have to pass over the period from 1820 to 1833, in which almost nothing was attempted in Parliament. During this period the population had greatly increased, and the nation had made great strides. But crimes had also increased to an enormous degree. According to the statistics, "within twenty years from 1828, crime had quintupled over all England, and in several counties decupled."

The statistics are not altogether reliable. Greater care had been taken to collect them in later times. Probably the police were more active in detecting crimes. But make what abatement you like, and there can be no doubt that matters looked very serious. Statesmen were roused to do something. Something must be done to oppose a barrier to the

rapid growth of barbarism. But what could statesmen do? The religious differences fronted them, and were insurmountable. If they pleased the Church they displeased dissenters, and the dissenters could effectually prevent further action. If they pleased dissenters they displeased churchmen, and they were also powerful enough to prevent action. The statesmen were quite willing to please anybody; but it was plain that they could not please everybody; and anybody and everybody seemed to have infinite power of obstruction. So Lord Althorp came forward in 1833 with a modest request that Parliament should grant £20,000 for education. In order that it might cause offence to no one, it was to be given to the National Society and the British Society; and, looking out for that part of education which seemed most neutral as far as religion was concerned, he selected stone and lime as least possessed of the disputable element, and resolved that the money should be spent only on school buildings. Lord Althorp deserves the highest praise for his exertions; but it seems to me that, though he is not to blame, the step was fraught with many evil consequences. It proceeded on no distinct idea of what a State is. It recognised religious distinctions in the distribution of national money. It set down the work of educating the labouring classes as a work of charity, not of State duty. It distributed the money of the State as if it were for a charitable purpose, and not a part of the business of the State. And it gave the money to those who did not need it, and neglected the poor.

In 1835, Brougham made another attempt in the House of Lords, and in 1835, and then in 1837, Mr. Wyse introduced a bill, with central board, local committees, and power to rate; but again the religious differences and the dread of popular education proved insuperable obstacles.

In 1838, the Committee on the Education of the Poorer Classes issued a report, in which the results of their inquiry are given thus:—

“1. That the kind of education given to the children of the working classes is lamentably deficient.

“2. That it extends (bad as it is) to but a small proportion of those who ought to receive it.

“3. That without some strenuous and persevering efforts being made on the part of the Government, the greatest evils to all classes may follow from this neglect.”

In fact, the education at this period was exceedingly bad and defective. A large portion of the working classes were not educated at all. Many of them received what little they did in dames' schools. Even those who had males for their teachers were not much better off, for any one was fit to be a schoolmaster, and a very large proportion of them were broken-down tailors or shoemakers, and old pensioners. Something, therefore, had to be done. And next year a vigorous effort was made.

First of all a committee of the Privy Council on Education was appointed, consisting of Lord Lansdowne, Viscount Duncannon, Lord John Russell, and Mr. Thomas Spring Rice. This proposal was

received with the wildest opposition. The Archbishop of Canterbury moved in the House of Lords that an address be presented to Her Majesty condemning the constitution of the Privy Council Committee, and it was carried by a large majority. What were the reasons? Lord Stanley stated that he thought that a committee of the Privy Council was not well adapted for dealing with educational matters, for the two reasons that they were not a permanent body, and that they were not necessarily well acquainted with education. But this was not in the slightest degree the motive to the opposition. It was because, as religion was an essential part of popular education, the clergy should be largely represented in the chief council of management. It was a monstrous thing in the eyes of the opposition that a wide ecclesiastical jurisdiction, as this of managing schools was in their eyes, should be entrusted to a committee consisting solely of laymen in no way subject to the Church. The Government persisted, however, in retaining the committee of Council; and the present mode of managing educational matters is the result of an exercise of the royal power, sanctioned, indeed, by a vote of approval in the House of Commons, by a majority of 5, but protested against by the Lords, with a majority of 111. Even the vote for £30,000 for education was carried in the House of Commons by a majority of only 2.

The committee of the Privy Council set to work at once, and two days after their appointment proposed a scheme for a normal college. The very

first condition of procuring a good national education they saw was to train good teachers. And perhaps they imagined they might most easily overcome the religious difficulty there. But if they imagined this, they soon found that they were mistaken. Religious instruction was to be considered as general and special. By the general religion was meant a devout spirit in which all the work of the school was to be done. This spirit was to pervade every part of the system. The special religion was to be given by the clergymen of the various denominations to the students according to their sects. In fact it was what is now called the secular system. The proposal raised a perfect storm within the Church, and the normal college had to be given up. The committee had to content itself with distributing the money voted by Parliament. It was bold enough to claim a much wider range of operations, and in its programme announced some wise principles of distribution.

The Church had been completely triumphant, and it was natural for the next statesman who dealt with education to pay regard to this fact. Accordingly, Sir James Graham, in his Factory Bill, gave exclusive privileges to the Church of England. But the dissenters were now roused to fury; meetings were held over the whole country; and the educational clauses of the bill had to be withdrawn. The dissenters were this time triumphant. But the agitation was great and universal. All the middle classes now felt a deep interest in the religious aspect of the education question; and it is now that

the various parties which have acted in this matter give definite shape to their opinions.

There had not been much speculation in England in regard to the functions of the State, but whatever had been, had not taken the form of laying it down that the State should provide for the education of its citizens. The nearest approach to this is found in an ingenious exposition given by Coleridge of the functions of the State in his treatise on Church and State. According to him, the English Church is an essential part of the constitution—one of three orders. The special function he assigns to it is the work of producing and increasing civilisation. It therefore includes the universities and all higher teaching, as well as the teaching of the lower classes. It is a mere accident that this Church is Christian. Its essential function is the spread of civilisation, and it is to be carefully distinguished from the Church of Christ in England. This, indeed, is a close approximation to the German idea. We might translate Coleridge's ideas into more modern words, and say that there ought to be a special order of the community whose duty it is to spread enlightenment. Their sphere embraces alike the education of the highest and lowest. They are justly entitled to representative places in the House of Lords, and their revenues are the revenues of what is now the Church of England. Somewhat akin to Coleridge's, but completely ecclesiastical, were the opinions of Mr. Gladstone in his work on Church and State. The State is an individuality. It has a conscience. It therefore feels itself bound to do all the good it

can, and to carry out its plans in the one way which it deems right. According to this theory, the State could undertake the education of all classes, but only a religious education, and the religion taught must be the true one; that is, the religion of the Church of England. Mr. Gladstone has confessed in his autobiographical tract that his theory was even at the time of its publication practically antiquated, that the admission of Catholics into Parliament was a practical abolition of the religious conscience of the nation. But his theory long survived the practical refutation of it. The political economists were also not opposed to the interference of the State in education; but they did not regard it as an imperative duty, and they did not extend the interference to the entire education of the community. Both Adam Smith and John Stuart Mill point out that the State has a right to interfere to prevent the labouring classes falling into a state of intellectual torpor, or to prevent parents in their ignorance doing serious injury to their children. But we find nowhere a wide grasp of what is required to organise education, and no attempt is made to connect the development of the individual members of the State with the work of the State. On the contrary, the argument most commonly put forward is an argument from *fear* and from greed. The lower classes are becoming more and more powerful. They are likely to overwhelm us, and therefore to prevent this calamity we must get them instructed. Or the numbers of the vicious are increasing. Ignorance is one of the causes of this; and so we must educate the young. Or it is the

special work of Government to protect life and property. The police is as yet the only instrument we have employed for this purpose. But prevention is better than cure. Let us train up the children aright, and then we shall effect a great saving in the police-rates, and be altogether much more comfortable. Yes, fear and selfishness have again and again been held forth as the motives for establishing a system of popular education. And, accordingly, the form which Government has to a large extent adopted in its interference is that of charity. It has helped the charitable to do the work; it has guided the charitable in doing the work. Let me for a moment contrast with it the Prussian idea. God has given to each man capacities. These capacities it is his own duty to develop to the utmost of his power. It is his neighbour's duty to help him to develop them. The neighbour can best effect this as a member of the State. The State, therefore, as the union of all, undertakes to provide the best means for the full development of all the powers of its members. It therefore establishes a complete system of education, from the most elementary to the highest stages; and this system renders the lowest education imperative on all, and the highest accessible to all.

By this time a great change had taken place in the religious condition of England. A spirit of deep earnestness had come over all the churches, and this spirit rendered the discussion of the religious question in education one of vital interest. In the Church of England there was all variety of parties. There still remained a large section who believed

the maintenance of the English Church essential to the maintenance of the constitution. They adhered to the National Society, and insisted on teaching the church catechism. There were others who were strong for maintaining the principles of the English Church, but thought the catechism trash, as Dr. Hook says, "and to be interpreted in a non-natural sense." But what came most prominently out was a large party who maintained that the education of the people was the peculiar jurisdiction of the clergy, that education must find its sole end and aim in religion, and that therefore only clergymen, or men in orders, could be teachers. At least the teacher must be a Church official, and entirely under the control of the clergymen. And these men refused to admit children into their schools if they were not permitted to give them the religious education which they deemed suitable. The children, they argued, will be lost eternally if they are not baptized. If I am not allowed to baptize them and admit them into the Church, what is the use of all other learning? Secular learning will merely make them greater scoundrels. These men strongly resisted the distribution of Government grants to dissenters. They thought all money not spent on their own party utterly wasted.

Another party, represented by the British and Foreign School Society, thought that religious teaching should certainly be given in schools, but that it ought to be confined to reading the Bible. The Bible was full of the purest morality and the noblest truth. It was, moreover, unsectarian. And there-

fore it was of the utmost importance that all the children of the empire should have an opportunity of imbibing its spirit of truth and love.

There was another party who thought that the State had nothing to do with the various sects of religionists—that the position which it should occupy should be one of absolute neutrality, and that it should confine itself to intellectual instruction. They did not wish to expel religion, or even the teaching of natural religion, on which all were agreed; but they thought the State should leave all dogmatic teaching to the churches. This was the only party that from the first urged that education should be national, that it should not be left to the charitable but undertaken by them all as a community, and that therefore there should be a regular organisation of education, with rates, local management, and a central board. They did much by the Central Society to spread information and rouse the people. Some of those who were leaders in this National movement were known to have turned aside from orthodox beliefs. It was, moreover, a plan fair to all minorities, Jews and infidels, as well as all the minor sects of Christians, and it was recognised as fair by thinkers of every shade of opinion. Accordingly it was stigmatised as godless and adverse to Christianity. That it was not adverse to Christianity, but, on the contrary, left the teaching of Christianity to Christians, became apparent to many of every sect. In the English Church, Dr. Hook with great eloquence argued for it as the only solution of all the difficulties in the present distracted

state of the religious world, and laid special stress on its being the only plan by which religion could be effectively taught, as well as the only plan by which all sections of the Church could join in the great work of educating the masses. Dr. Chalmers also announced the same principle in the clearest language, though some of his followers think that he would have applied it differently from the National party. And the great body of dissenters ought to have adopted the principle. But they were at this time out of humour. They thought the Government was antagonistic to them. They had, moreover, always had very, or, as some people think, oversensitive consciences. Their minds had got into a state in which they were more alive to differences than agreements. And when they differed in opinion from their fellow-citizens, they had come to think that united action was impossible; that their consciences might be compromised by worshipping in the same church, or helping in the same religious scheme with those whose opinions were in their eyes wrong. They gave an extreme instance of this tendency in this case. They came to the conclusion that the State had not only no right to meddle with religion, but that it ought not to meddle with education at all. They had adopted the police idea of the State. The State should do nothing but guard life and property. Voluntaryism must do everything else. They gave a great many reasons for this belief. One lecturer at Crosbie Hall adduced nine. Some of the arguments were peculiar. Here is one from an eloquent preacher, Dr. R. Winter

Hamilton—"I am anxious . . . to defend and hallow the parental constitution. . . . Come once between parent and child, and the golden band which knits all together is snapped asunder. What is that—call it State, conspiracy, rapine—which affects to take charge of my offspring? My other acquisitions are conditional; my other treasures are alienable; my civil rights are things of covenant and arrangement; these have been earned, inherited, or won! But I have another property and propriety in my children; these are imprescribably my own—they are myself." You will notice here the absolute and entire difference which the lecturer makes between the State and himself. He never seems to feel that he is a member of the State, that his very existence in society implies restrictions on his individual liberties, and that in certain circumstances, as in war, the State has a right to demand and expect the sacrifice of himself.

Animated by this isolating principle, the Independents resolved to protest against Government doing anything for education, and to have nothing to do with any Government schemes—after many years to regret it deeply, and to confess that they were wrong. There were some of them who at the time told them that this would be the case. Dr. Vaughan, in the *British Quarterly Review*, urged upon them the adoption of the principle of the separation of the religious from the intellectual instruction, told them what noble testimony to the principle the United Presbyterians had given in this hall, and what great advantages they were losing by withdrawing from the Govern-

ment proposals. And, in fact, they had no great reason for suspecting the Government. Statesmen cannot help having recourse to compromises; and they, therefore, often make proposals and pass laws which are not in exact harmony with their own sentiments. But they had already shown that they believed the separation to be the solution. Lord Derby had proclaimed this in the establishment of the national system in Ireland. Lord John Russell's normal college was substantially an exemplification of the same. And in a year or two Sir Robert Peel was to illustrate it in the Irish colleges. In fact it is eminently the plan of a statesman, because all will allow that at the least it seems to treat all with that equality which has been the guiding principle of British legislation.

This, then, was the position of parties in 1846. A very large portion of the English Church, and of some other ecclesiastical bodies, were strongly in favour of the denominational system. They were therefore opposed to a rate which they thought would throw the management of education into the hands of the ratepayers. Most of the Independents, on the other hand, thought that education was entirely beyond the sphere of the State, and therefore refused to have anything to do with the Government money. The statesmen, and a large portion of the educated classes of all denominations, were for a national system; but they were a small minority, and the statesmen had made several efforts which had proved utterly abortive. There was nothing for it, therefore, but to continue the denominational system. At the same time, it was plain that some-

thing had now to be done more than had ever been done before. The Committee of Council, under their powers of 1839, had appointed inspectors (denominational inspectors, of course) to examine into the state of the schools. Their examinations could be only of a limited nature, for they were few in number. But their reports revealed a deplorable state of affairs. The education was fearfully defective alike in quantity and quality. This led Mr. James Kay, afterwards Sir James Kay Shuttleworth, then secretary to the Committee of Council, to see if something could not be done. Sir James had had considerable experience in dealing with the poor. He had served an apprenticeship under the best of teachers, Professor Alison, of this city; and he had at various times laboured earnestly to ameliorate the condition of the poor in Dublin and Manchester. In the course of these benevolent efforts he had come to lay special stress on education, and for once in our political arrangements the right man was in the right place. He visited Germany and Switzerland; he examined the various methods of education; he made himself master of the subject. And the necessary effect of this was that he was fully convinced that the only way to educate the people of England was to provide for a supply of good teachers, and to make the position of teacher at once profitable and honourable. The Normal School of 1839 had been given up, but Sir James was not baffled. And by his own means and the help of friends he established one in Battersea in 1842. The various religious bodies soon followed the example, and

"within six years fifteen training schools were founded."

In 1846 minutes were passed by the Council in harmony with this movement. Special encouragement was to be given to pupil-teachers, young lads from thirteen and upwards, who should be apprenticed to the work, and trained by experienced teachers. These pupil-teachers might ultimately find their way to the normal schools, and emerge from them perfectly qualified teachers. Encouragement was in various ways given to teachers themselves. They were to be paid for teaching the pupil-teachers. Part of the grant was also to be distributed to them in accordance with the certificate of competency which they had received, and the efficiency of their schools. The results were soon manifest. The profession of teacher became an object of desire. The teachers were full of spirit, and did their work eagerly. They began to feel in some measure that they were servants of the State, and that their special work was to promote the well-being of the entire community. There was keen discussion as to the best methods of education. There was a determined resolution to arouse the children to intellectual vitality. The influence of Pestalozzianism spread among the teachers; natural methods were adopted; and altogether great and good work was done. From 1846 to 1861 we have the most flourishing period of English education. And a great deal of the credit of this is due to the wisdom and energy of Sir James Kay Shuttleworth.

But the system became every day more and more

distasteful to statesmen, and gave rise to bitter complaints. The principle of giving grants to those who had the best schools simply meant helping those denominations that could help themselves. It left in the cold shade the poor and the wretched children who went to no school, belonged to no denomination, and were ignorant of all religion. And this is true. The good effects of the system were confined to the upper portion of the labouring classes. It left the dense masses of ignorance in large cities untouched. And a large portion of the money given by Government was merely embittering sect against sect, and was spent on proselytising. Moreover, the system of training pupil-teachers by grants seemed unfair to the rest of the community. These poor young lads were receiving a very good education at the public expense. They were infinitely better educated than the majority of those who went to genteel private schools; and when the pupil-teacher left the Normal college he could compare favourably with those who had been at the most aristocratic schools, or even at the universities. The pupil-teacher soon discovered this himself. Many of them became aware that a good education could bring a much higher income in other professions than in that of a schoolmaster; and accordingly they passed from the school to the merchant's house, and opened up for themselves careers of wealth and eminence. It seemed hard to the rest of the community that the public money should be spent on fitting a special number of poor boys for lucrative positions which they gained over the heads of men trained at expen-

sive private academies. But last, and greatest of all, the sum spent on education had risen from £100,000 in 1846 to £836,920 in 1859, and there seemed to be no limit. In proportion as a sect was active and vigorous in the propagation of its special opinions, in that proportion would it spend money on schools; and in proportion to the money spent on schools was the money given by the State.

Various efforts were made to remedy the defects of the Privy Council plan, most notably by the veteran friend of religious equality—Lord John Russell; but the religious opposition was too powerful. So at last, in 1858, a commission was appointed to inquire into the state of education in England; and, in order to aid Parliament to form a correct notion of what other countries were doing, Mr. Matthew Arnold was sent to France, Holland, and Switzerland, and Dr. Mark Pattison to Germany, to report on the education of these countries. Six volumes of reports were published in 1861, and various suggestions were made. But the whole trouble might have been spared. In 1855 the office of Vice-President of the Committee of Council was established, with a salary of £2000 a year. At this time this office was held by Mr. Lowe. Mr. Lowe had received his training at Oxford, when the methods of teaching were about as bad as they could possibly be. He had afterwards become a tutor at Oxford, and had aided in carrying out these bad methods. He had then, after an ineffectual attempt to become Professor of Greek at Glasgow, thrown up the teaching profession and gone to another part of the

world. Here his indomitable energy and prompt decision had given him a prominent position. On his return to his native land the wealth he had made, and the experience of the world he had gained, came to the aid of great intellectual powers and a strongly marked character, and he soon acquired great influence as a politician. By some stray chance he had got into the education department, for which he was singularly unsuited. He was indeed a finished scholar according to the Oxford stamp of that day; but the methods of education to which he had submitted had been wrong. So he told the members of this institution, in a memorable address. Success had smiled on him only when he turned his back on teaching, and he believed that his education had not helped him in making his way. He seemed inclined to apply his own experience to all education, and to think the whole affair a kind of humbug. He did not imagine that there could be any science of education. He did not see how education could do much good to the working-classes. In fact he had no belief in the power of education. Accordingly he let the commission go its own way. He selected the one part that suited him. The commissioners had reported that the pupils were behind in the ordinary crafts of reading, writing, and arithmetic. Mr. Lowe thought that here was the keystone of a new building. The teaching of geography, history, and other subjects, may go to the winds; but we can compel the teaching of the three R's. We shall break up the whole of this pupil-teaching system. We shall diminish the sum spent by Government by

paying only for so much progress made in the three R's. We shall leave the teacher entirely under the control of the managers. We shall have nothing to do with him. We shall have our inspectors to report to us how the managers are doing their work, and we shall pay the managers for the work done. Accordingly the Revised Code was planned. Mr. Lowe, it is said, had seen the plan work among the convicts of Australia, and he thought that it would, at any rate to some extent, solve the problem here. This code is one of the most extraordinary products of legislation. It violates almost every law of pædagogic science. The child's life is grouped from seven to thirteen into six stages. Mr. Lowe, in his standards, defines how far the child's mind shall grow in one year in the acquisition of reading, writing, and arithmetic. He supposes that all children will acquire at the same or nearly the same rate. His code implies that, if the teacher finds that a child's mind will not make progress at this rate, he should have nothing further to do with it, but give it up as an unprofitable speculation. And finally it supposes that the great aim of man's being, as far as his fellow-beings can meddle with it, is to learn reading, writing, and arithmetic. I have said that Mr. Lowe's code implied all this; but it is evident that Mr. Lowe did not trouble himself with the educational aspects of the case. It was as an economic and business-like performance that he looked on the matter. And the clear proof of this is in the fact that the Government took no pains to deal with the individual improvement of scholars,

A child was never to know whether he had passed a particular standard or not. The schoolmaster was not to know. He was to know only how many had passed, and to guess who had and who had not. But one thing was demanded by the economic arrangement—that if the child had tried in one standard, it should not try in it again. And probably a considerable number of children have tried in all the standards, and failed in them all, without knowing it. As an educational device, therefore, this mode of standards was an entire failure. It was condemned by all educationists not in the Government employment, and by nearly all of them too. The whole body of Scotch teachers condemned it from an educational point of view. And the results of it were disastrous. The profession of teacher at once sank. Men who were eager to get in were now eager to get out. The number of pupil-teachers was of course diminished. The students at the Normal colleges became fewer; the class of students was lower than that of previous years in position and ability. The annual reports were full of lamentations. The teaching had become mechanical. The higher subjects were neglected. Even the reading, writing, and arithmetic, were not improving; and it was well known that these arts were more easily lost than they had been before, because cram had been substituted for interest. Sir James Kay Shuttleworth thus describes the effects; “The Revised Code has constructed nothing; it has only pulled down. It has not simplified the administration. It did not pretend to accelerate the rate of building

schools, or to improve their structure. It has not promoted the more rapid diffusion of annual grants and inspection to the apathetic parts of cities, or the founding of schools in small parishes and for the sparse population of rural districts. It has generally discouraged all instruction above the elements, and failed in teaching them. It has disorganised, and threatens to destroy, the whole system of training teachers and providing an efficient machinery of instruction for schools. These ruins are its only monuments. It has not succeeded in being efficient, but it is not even cheap; for it wastes the public money without producing the results which were declared to be its main object."

These might be thought to be the opinions of an adversary, but they will be allowed to be true by all who have carefully examined the subject. But the most remarkable fact has yet to be told. Complaints were uttered every year by inspectors. The schoolmasters were loud in showing the evil effects of the system. As clear as day was it proved that education was going back; but, loud as the cry might be, it never reached the ear, or at any rate the heart, of the British public. And no greater proof can be given of the indifference of the vast masses of the people to a good system of education and of their ignorance of the best methods of instruction. The British public did not complain. Ten thousand times more complaints have been made about the 25th clause, than about this lowering of the education, from 1861 to 1870.

But this Revised Code was equally unsatisfactory

from a State point of view. I do not know what Mr. Lowe's principles are; I do not know that he has fixed principles at all in many matters. It is generally the result of the kind of education which he received that a man forms no rounded view of human life and its organisation, but in harmony with his character picks up his principles as he goes along, and lets them drop when they do not suit. But if I may judge from evidence which he gave before a subsequent commission, Mr. Lowe belongs to the National party. He stands out for religious equality, for rating, for local government, and a central authority. But at this particular time, and with the facts of the commission before him, he expressed his sentiments thus: "Hitherto we have been living under a system of bounties and protection: now we prefer to have a little free trade."

Yet the principles of free trade should have led him a great deal farther: it should have brought him to the same platform with the great body of the Independents. Government should not interfere at all. And there are really only two consistent methods,—that the State should organise the whole, with due regard to the activities of each portion of it; or that it should not meddle at all. But this half-meddling, it seems to me, puts the State into a totally false relation to its members. The members of the Government took hold of the public purse as if it belonged to them, and they were something quite distinct from the State. They turned round to various private parties, mainly religious communities, and examined how they were doing a

certain piece of work. And when they found them doing their work, they put their hands into the public purse and said, "There, my friend, is £10 for you; there, £20 for you;" and so on. Now this supposes one of two things: that Government is a giver of charity, and gives to those charitable institutions that do good service; or that Government is an employer of labour, that the managers of schools are the labourers, that the members of Government are the masters, and that the relation between them is that of employer and employed. Even on this last supposition it is not easy to see why the Government should interfere as it does, because the work which it wants done is not a modicum of instruction imparted each year, but a final result. It wishes its citizens up to a certain mark. It should pay for its citizens when brought up to a certain mark. In other words, it should pay only for those pupils who have reached the standard of education fixed by Government as absolutely requisite for the adequate performance of the duties of citizenship. But, finally, the Revised Code turned out no remedy at all for the economic difficulty. A great deal of money was at first taken from the schoolmasters, but it was nearly all given to inspectors. The work of these inspectors was, comparatively speaking, not of great advantage. They had simply to examine children in reading, writing, and arithmetic. The work might have been well done by pupil-teachers at 10s. a week. And yet, in defiance of the free trade principle, these inspectors were paid by fixed salaries. These

salaries were increased with increase of years of service, though the inspectors might not do their work better at the end than at the beginning. And, finally, they had retiring allowances. After the first year or two the sums voted for education went beyond what they had previously been. The sum last year amounted to £1,107,430:16:7; of which, £108,949:16:1, or a tenth of the whole sum, is spent on the maintenance of the Education Department and the inspectors, and £104,987:11:9 is given for Scottish education.

The Revised Code had not existed many years when inquiries were again instituted into the working of the system. This time attention was specially drawn to the nature of the Education Department. This department is the most complete illustration of the principle of centralisation in the world; but it was at the same time most loose in its construction. The department consisted of a president, a vice-president, and a few Privy Councillors, members of the Committee of Council. The question was raised, What were the functions of the president, the vice-president, and the committee? And on all these points presidents and vice-presidents disagreed with each other. Mr. Lowe stated that the committee was invoked only for purely legislative purposes; Mr. Bruce, that in his experience it had been useful on two occasions; Mr. Adderley, that it was useless, and worse than useless; Lord Russell, that it had responsibility; Earl Granville, that it had absolutely no responsibility. In regard to the president and vice-president, the

question arose who was the responsible minister. Mr. Lowe thought that the vice-president was not a responsible minister, and that his position was that of an Under-Secretary of State. Mr. Adderley was of the same opinion. Mr. Bruce took a different view; and Lord Granville held that the president and vice-president were both responsible ministers. All were agreed that the chief part of the work fell on the vice-president.

Sir John Pakington presided over the commission that examined into these matters. The commission could not agree on a report. Sir John drew up a report himself, strongly recommending the appointment of a responsible Minister of Instruction; but before there was full time for considering the matter the Tory Government was turned out, and the commission broken up.

During this time there was going on a keen discussion of the religious aspect of the question. The large majority of the English clergymen still held that the religious and intellectual instruction could not be separated, and that therefore both must be under the control of the clergy. It also followed from this principle that every child going to a Church of England school must submit to the entire religious instruction, whether the parents wished it or not. But Government felt this to be unfair. Sir John Pakington recognised this as unfair, and the question was keenly discussed whether any school not having a conscience clause should be allowed to claim Government aid. The agitation over the country was great. Whole

dioceses of clergymen were almost unanimously against a conscience clause. They would not submit to such a restriction. At length came Mr. Forster's Bill, and the matter was decided against them. Mr. Forster's Bill settles the question that religious instruction can be given separately from the intellectual. It also affirms the principle that Government has no business to deal with the religious instruction. His code does not pay for religion; and the inspectors are no longer appointed as inspectors of schools belonging to a special denomination. But for all this it has left the bone of contention as big as ever. It is inconsistent with its own principles. Though Government inspectors are not to meddle with religion, the Act prescribes that in board schools certain religious text-books shall not be used, thus breaking through the principle of non-interference. Again, though the Privy Council refuses to decide on the quality of religious education, it asks the local boards, purely political bodies, to decide whether religious education is to be given to the young in the schools within their districts. The result is, that for some time to come the eye will be turned away from the real end and aim of education. The local boards will not be elected for their capability to deal with educational questions. The best modes of educating will not be the special study of the candidates, nor the theme of their addresses to the electors. It will be still the old religious question. Every three years we shall have a round of bitter religious animosities; and

even the Churches, the resting-places from the cares of earth, are to be turned into political machinery for securing the election of certain men on the boards. There can be no doubt, however, how the contest will end. The march of history points conclusively. Compromises are always temporary. You can reach only one of two goals. Either the entire education will be under the control of the clergy, or there must be a distinct separation between the intellectual and the religious—the State managing the one; the clergy, or the Churches, the other.

The same is the case with the principle of rating. The Act acknowledges its wisdom, but retains to a large extent the voluntary. But the voluntary and the rating are inconsistent with each other. The one looks upon primary education as a matter of charity. It treats the working classes as miserable beings who require to be provided for by combined individual and State charity. The other does not recognise the working classes as a class in the State. It lays down the principle that the State is a society where each individual contributes to the welfare of the other. It regards the work of education as a work that can be done most effectually in common. And therefore each man in the State contributes to the work according to his ability.

And it is plain that the application of the principle of compulsion should not be left as it is to be settled by local school-boards. It is a principle applicable to all or to none, and it is a principle which requires that it be applied to all, if its value is to be truly estimated.

The Act of 1870 was, however, a vast advance. It gives the power of organising education. For sixty-three years the country had waited for this Act. Suppose that Brougham's Education of the Poor Bill had passed in 1820, what vast numbers, I may say millions, of children would have been educated who remained ignorant, grew up miserable and wretched men, and died in vice and beggary. And why were they not educated? Simply because too much power would have been given to the Church of England. But surely every dissenter will now allow that it would have been infinitely better for these children to have been educated within the Church of England than not educated at all. And if Lord John Russell had had power given him in 1839, what a vast number of children might then have been gathered into schools. And surely every member of the Church of England will now allow that it would have been infinitely better to have educated these children in all civil arts and moral training, leaving their religious education to the various Churches, than to have left them without either civil or religious education. It might form a useful meditation for some Sunday if we were to picture before the mind the long, haggard, and weary procession, ever swelling, of the thousands and thousands of hapless children who have marched up to be sacrificed to the Moloch of our religious differences.

Mr. Forster came to his task with an earnest desire to spread knowledge among the people. He had from an early time taken a warm interest in edu-

cation. He had long been a manager of schools ; and accordingly one of the first things he did was to propose an alteration of the code, and to pay for subjects which had been omitted in the Revised Code. But he did not propose to alter the method of payment, and the vices inherent in the Revised Code still attach to the new code. And so the matter rests. No doubt progress is making, but it is evident that while we go on in the same track, it will be ages before England reaches the thoroughness of the Prussian system. And history seems to me to point out what requires to be done.

1. It is plain that these religious differences have put our Government entirely on a wrong track. It is the business of the head department of education to point out what is the aim of primary education, and to insist on it that every school carry out this aim. No child capable of being instructed should leave the school until he has attained a certain amount of culture. Instead of trying to allure religious managers to attain various points of excellence, they should make a certain success absolutely indispensable. And if payment for results were to continue, this is the one result for which payment should be made.

2. Every means must be taken to secure a regular supply of thoroughly trained teachers. This is the first condition of a successful scheme of education. No man should be allowed to be a teacher who is not thoroughly qualified for the work ; and if by any chance a man should become a teacher who is not qualified, he should be removed as soon as possible from the office. At the same time the teacher

should have strong inducements held out to him to continue cultivating his own mind and prosecuting researches into the methods of his profession. At present, when the schoolmaster has once got a decent school, he has reached the limit assigned to his ambition, and he may thus at twenty-one gain the highest prize attainable. In Germany he may rise, and continue to rise, until he retires in honour, and with a pension in old age. There are two special positions which ought to be open to him—inspectorships and teacherships in Normal colleges. At present the inspectorships are practically closed against him. On the Continent the special qualifications for an inspector are that he have a thorough knowledge of the science of education, and that he have much experience in educational practice. No such qualifications are demanded in England. The first qualification is that he be not more than thirty-seven years of age. The other is that he have strong political influence, and be an educated man. Special fitness for the work is not dreamed of. And as it is usual to appoint these inspectors at an early age, they begin their work without any knowledge of the science of education, and they continue to the end without any experience of what it is to teach. And in consequence of the restriction in age, and from other circumstances, any man who devotes himself to teaching, however skilled he may prove to be, has but a small chance of becoming an inspector.

3. The present system of Government grants should cease. There is but one constitutional method of supporting schools; that is, by rates. And it

seems to me that the Prussian policy is wise which lays upon the parishes the duty of supporting the common schools. Only where the locality is not able to pay a schoolmaster a sufficient salary ought Government to offer aid, and that aid should as far as possible be temporary. There is at present far too much centralisation in the Education Department. Full responsibility should be thrown on the different localities to maintain their schools in such a state of efficiency as to send forth a regular number of pupils satisfactorily educated.

4. One obstacle to success in an English education deserves special attention. Our method of spelling causes enormous difficulties to children, and entails the waste of an incalculable amount of energy. A reform in this department would be a blessing. A reform in this matter, with schemes like Professor Clark's, Mr. Ellis's, or Mr. Bell's before us, would be easy. All that is required is that the community agree to it. And finally,

5. The education of the children of the middle and upper classes, both boys and girls, must be reorganised upon a national basis. The present ecclesiastical methods must be given up. The monastic institutions, characteristic of all the countries where the Reformation failed to make much progress, must be dissolved; and schools and universities, open to the entire people, must be established on principles in full harmony with the educating influence of the family.

When all these things will take place, it is not for me to prophesy. But I conclude this lecture by

noticing that I have been dealing solely with intellectual education. Many people maintain that, though English schools are singularly defective, English life is a great educator. Some go so far as to maintain that the English are superior in this respect to all the nations of the earth. Their political liberty, their municipal institutions, their freedom from bureaucratic control, and many of the arrangements of social and domestic life, give them a training such as is given nowhere else. I am not inclined to deny this. I think there is a great deal of truth in statements of this nature, though often the advantage is exaggerated. But the one kind of education does not militate against the other. Both are good, and are mutually helpful; and the intellectual is becoming every day more necessary for the practical. We work now less and less by mere instinct or tact, more and more by insight and intelligence. And it cannot be doubted that where the intellect is dulled, and men see not the truth, even the education given by action will turn out sadly defective. For the words of the Proverbs of Solomon hold true for ever: "Where there is no vision, the people perish."

## LECTURE III.

### THE AIM OF PRIMARY EDUCATION.

The Nature of the Inquiry—Educative and Uneducative Instruction—The Aim of the School not to train for a Trade—Theoretical Side of the Question—Instruction is calculated to fit the Pupil for the discharge of his duties as a Citizen—But has a higher Aim—The Limitations to the Work of Education: in time; in the School being only one of the Educators; in the Means at the command of the Teacher—This last explained by an exhibition of what is included in Education—The field for the Teacher's activity—Discipline—Educating the whole Nature—Some of the Principles of Educative Instruction—These Principles applied—Subjects of Instruction—The Revised Code—Little Educative Instruction in it—Mode of distributing the Public Money.

I HAVE chosen for my subject this evening the question, What ought to be the main aim and end of an educational bill for Scotland, and how can this end be best accomplished? The question may be put in another way. It is proposed to tax Scotland by local rates. It is proposed that Government expend a sum of money somewhere between £100,000 and £300,000 for the primary education of Scotland. What good is to be done by the money thus raised by local and general taxation? What purpose do we seek to accomplish by it? And how can that purpose be best accomplished?

I need not say that this inquiry is of the deepest consequence. And yet it is one which legislators and politicians are apt to overlook. A bill for education touches on many interests, political, economical, ecclesiastical, scholastic, and others. Many are inclined, according to their training or their position, to raise one or other of these aspects of the question into paramount importance; and thus the main object of the bill may be pushed to one side or be entirely frustrated.

There is another reason why the main aim of the bill may be overlooked. The nature of the action of the school upon the minds of the pupils can be accurately ascertained only by careful psychological investigation and close and long-continued observation. It is not a matter which every one can determine for himself off-hand. And yet there is nothing more common than to find men who have taken no trouble to search into principles and to make themselves acquainted with the history of education, giving forth and maintaining in the most dogmatic manner their opinions on the subjects, effects, and methods of education. And, accordingly, we find a great number of opinions afloat on the question of education, of which the holders of them can give no rational account. In regard to the very point before us, some would at once glibly answer—"Education is a blessing; we must therefore extend its benefits to all the working classes, and we have no doubt that it will do good to the community, diminish crime, and increase virtue." But then start up others, among them members of the House of Peers,

and they say, "We doubt very much if education diminishes crime. It merely alters the nature of the crime. Statistics do not prove that education is diminishing crime, and we don't see how it can have this effect." And so the contest may go on for ever. Now the fact is, that an analysis of the operations of education shows that there is a kind of education (improperly called education) which cannot in any degree tend to diminish crime, which does not affect the moral character of the pupil at all, but which furnishes him with ample means for greater virtue or greater vice; while it is equally true, and doubted by no man who has investigated the question, that there is an education whose tendency is to diminish crime, to build up to virtue, and to make those who are thus educated better citizens and better men.

This is the subject which we shall now attempt to discuss. Let us try then to ascertain what aim we ought to have in giving the working classes the means of education. Now three aims have been proposed, and we shall examine them.

The first is that the working-man should be trained simply for his trade. The working-man is to be employed the whole of his life in acting on the material through the material. And to fit him to do this is the object which we should have in giving him a good education. Let us look at this aim as it is presented to us practically and theoretically. We shall look at it first practically. Here is a boy who is intended to be a shoemaker. For the most part of his life he is to be employed in

working with leather, in making the various parts of a shoe. Is the schooling which the nation is to help in providing simply to fit him for making these various parts of the shoe well? Is he to learn to read, write, and cipher, simply that he may be able to draw up accounts and advertise his boots? Looking at it in this bald form, we cannot help feeling that such aim is inadequate. It is a substantial good both for the man and the community that he should have a trade, and that he should be a skilled workman; but there rise up two doubts—one whether the school is the place where he can best learn skill in his trade, and the second, whether the school is to do no more than fit him for his trade. This second doubt we may settle at once. The trade is the mere means by which the man is to live. But why is he to live? What object has he in living? He discharges so much of the duties of his life in helping his fellow-men through the services done by his trade. But he is fit for much more than contributing somewhat to the material comfort or luxury of his fellow-men. He is himself something infinitely higher than his trade. He has wants and aspirations far beyond those which can be satisfied by daily material action, and therefore, to confine our training to fitting him merely to be a tool for the comfort or gratification of others is not a satisfactory object on which to spend the national wealth.

This question has a theoretical side. It has been argued by one of our profoundest psychologists that those branches of study are most important which are most necessary. Now the possession of a trade

is an absolute necessity. The workman must obtain the means of living, and therefore the knowledge or training which enables a man to reach this is the most important. There is a fallacy here—a fallacy of an exceedingly ancient date. There is nothing more essential for our living than that we should be able to convert our food into blood. Yet we require no education to do this most important act. We do not require to know how the process takes place. We do not require to think about it at all. It is a very important operation in itself, but as far as our training goes it is of no importance at all. It was essentially necessary that Milton should breathe while he was writing the *Paradise Lost*. • He need not have written the *Paradise Lost* at all, but he must have breathed if he lived. The breathing was an absolutely essential operation—the writing of *Paradise Lost* was not. Yet would it not be absurd to maintain that Milton's breathing was a grander work than his writing of *Paradise Lost*? The truth seems to be that there are certain activities which are the essential conditions of all our higher actions. These activities are for the most part involuntary, but some of them are within our power. So far as they are in our power, we are bound to attend to them. But they need little or no training for the fair exercise of them; and education comes into full play only when we are trying to awaken the full swing of voluntary activity on subjects less pressing as daily necessities for mere animal life, but really essential to the inner and higher life of man. Quintilian has stated the matter very concisely and very

wisely—"We cannot arrive at the highest excellence unless by starting from the beginnings, but as the work goes on those things which are first in order begin to be least." And the same principle is well laid down by Clemens Alexandrinus—"Now we know that those things which are difficult to procure are not necessary, but that those things which are necessary have been kindly made by God easy to obtain. Wherefore Democritus well says that nature and teaching are similar, and we have given the reason concisely, for teaching harmonises man, and by harmonising him gives him a nature; and it makes no difference whether a man be created such, or be fashioned into such a being through time and instruction. But the Lord has given both—one by creation, the other by the renewal and re-creation of his covenant. Now that which is advantageous to what is highest is rather to be chosen; but the *mind* is the chief thing of all."

The second aim which has been proposed for the training of the working-man in the school is to fit him to discharge all the duties of a citizen. This is a much higher aim than the preceding. The citizen has first of all to learn to respect and observe the laws of his country; he is to have a deep and loyal interest in its institutions and their prosperity; he is to exercise his right of assisting in the election of a member of parliament, and through his right he becomes occupied with thoughts as to what it is best and wisest to do in regard to affairs both at home and abroad. He is, above all, deeply concerned with the relation between employer and employed, the

laws of trade, and the interests of his fellow-workmen. Now our two questions come up here—Can the school do this for the workman? and does this exhaust the aim of the school? I answer that the school can do much towards forming the right citizen if this aim be kept distinctly in view in the arrangements; and I answer to the second question that it does not exhaust the entire aim of the school, that there is a larger and higher aim, of which this forms a most important part, and this part is best accomplished, not by looking solely to itself, but by having always in view the larger and higher end.

What is this larger and higher aim? It is to make the pupil as perfect in every direction as we can; to bring out his nature into fullest activity on all sides; to develop his powers in an equable and harmonious completeness, so far as time and circumstances permit. This is the work of education. But those make a great mistake who suppose that there is one general ideal for all mankind, that there is one general mould into which all the individuals can be cast. Each human being has an individuality of his own; and not merely is he different originally in power from others, but all the special exercise of his powers is limited by time and by space. The child who goes to our schools is the child of the nineteenth century; he is enveloped by all the peculiarities of that century from his earliest breath; he cannot, if he would, escape from the overpowering influences of his age. And then he is the native and inhabitant of this country, he derives benefits from its institutions, he moves amidst its

people, he is governed by its laws, he is by birth a member of the British nation. And so the full development of his powers as a human being can take place only in connection with the present age and his present country. And thus this general aim includes the two previous, and gives a higher value to them. His possession of a trade is his contribution to the general welfare as well as his own means of subsistence, and in the very attempt to be a good man he must be a good citizen. His training towards perfection of manhood lies through a knowledge and discharge of his duties as a workman and a citizen.

But the question arises here—How far can the school fit for this full development of the human being?

Here we are met by limitations which it is requisite to notice.

First, there is the limitation as to time. The school has to do its work within a limited time. The period during which the child is to be at school is, generally speaking, between the ages of six and twelve. But often the period for school education is much less than six years. Out of this limitation two difficulties arise. The first is, that you can educate only according to the laws of the mind, and one fixed and firm law is that there is only one way of progress in the soul—only from the concrete to the abstract, only from the individual to the general, only from the known to the unknown, only from the affection which embraces few to the affection which embraces many; and never in a contrary way.

Now the age at which the working boy is instructed does not admit of the highest developments. The mind is not strong enough, the mind has not had sufficient practice nor sufficient experience.

And yet the school education should, as far as possible, be a whole; and this is our second difficulty. The process of forming the mind and of evolving its powers is a slow one. It is not done in a day or a week. The wise educator has to calculate a long course of training and discipline to bring his pupils up to a certain standard of intellectual and moral excellence. But a stopping short of his plans, a break in his action, or rather a break off at the wrong time, may turn all his efforts to waste. Every one notices the absurdity of a house half built. Every one would blame a doctor for leaving off before the patient was cured; but it is not perceived so often that it may be equally fatal for the real results which we wish to gain by education to leave the training cut short in the middle.

A second limitation arises from the fact that the school is but one of the agents in education. A man receives his education from every possible source. He is drawn out by the external world, above all he is influenced by his own nature and impulses, and multitudes of men are acting upon him. The teacher is but one of these. He has the advantage of coming to his work with the deliberate purpose of evolving the powers of the child; but he may have to contend with opposing influences from without. This is specially the case with the lowest class of children. The homes of these children are anta-

gonistic to true education. The lesson of the school is often undone at the fireside. The teacher has a continual battle to fight.

There is also a third limitation in the means which the teacher has to employ.

To explain this more fully, I must draw your attention to the nature of the human mind and its operations. The first activity of the human mind is on the external world. Let us look at it in this its first development. An external object, say a tree, is before the eye. What takes place? The mind has some sensation, and when it reaches consciousness, the mind perceives a certain object before it, which has green leaves and branches and a stem. But it not merely perceives. It is filled with admiration of the beauty of the tree; it derives pleasure from gazing at it. It wonders at its size, it feels keen delight in looking at the greenness of the leaves, it is charmed with the symmetry of the branches. But let us suppose that the child goes away from the tree—the impressions die away—a blank is left—and the child has a desire to fill up the blank, to see the tree again at some future period, and in consequence of this desire it will leave its home at a proper opportunity and go to see the tree once more. Here we have the three aspects in which objects affect the mind. They present the child with perceptions which ultimately become the amount of knowledge which he possesses; they give rise to feelings or emotions; and they awaken desires which will lead to action. These three, then—representations or perceptions, feelings, and desires or conations—

are the three directions which the human mind may take. But it is important to notice that our separation of them from one another is the result of an analytic process on our part, and that they are never really separated. There can be no perception which has not a certain amount of feeling and conation connected with it, and every feeling and conation may be presented to the mind in the shape of a perception or proposition. But the preponderance of the elements may vary exceedingly. At one time we may have a strong desire, with the representation almost entirely obscured. I see a beautiful face for the first time, and I am so lost in the charm which it exercises over me that I cannot tell one single feature in it. I can only say that it is beautiful. I have acquired such an intense desire for some particular object, that I forget altogether to think of the nature of the object and the consequences of my conduct. I am so satisfied with the perception of a particular object, that I am not conscious of the pleasure I feel in the perception, and have almost no desire to recur to the subject after I have once thoroughly examined it.

Now it is the business of education to bring fully out these three activities of the mind. Every object is adapted to produce certain perceptions, certain emotions, and certain desires. And when the mind is so trained as to receive these aright, it is in a healthy state. In the case of perceptions, it takes clear and accurate note of the objects; it detects similarities, it unites them into groups, and gradually rises in this way from the individual and concrete

to the highest and most abstract generalisations. In the case of the feelings, it learns to love those objects that are truly lovable, to admire those that are really admirable, to detest what we are intended to detest, and it puts a value upon the various objects; it feels this action to be higher and nobler than that other, this good to be a greater good than this other. And from doing this in particular cases it rises to the love of groups of similar lovable objects, expanding as it is developed; and then it sets its desire on what is really desirable, and tries to attain it. And from these efforts in individual cases it rises to large general aims and long-continued pursuits in one direction.

We have thus three regions of culture for the human soul—the culture of the intellect, the culture of the feelings, and the culture of the practical powers of the soul. The culture of the last two leads to what is called character; and this, I need not say, is of primary importance, for it is the end which the nation as well as the individual ought to seek in its efforts to educate the rising generation. But it is in this very field that the difficulty presents itself. Let me illustrate it by an example. I take A, B, and C, to look at a picture in our National Gallery. Now I can tell positively what the three will perceive. They will all agree in stating that they saw certain colours, certain forms, certain groupings of the personages. But I can form no sure idea of what each felt and each desired on seeing the picture. A's mind may be clouded by previous distress, and so he is displeased with the

picture; he does not like the principal figure; he thinks the colouring too bright, the whole appears to him as a daub. B admires the courage expressed in the face of the principal figure; he loves the man, but he hates the black scoundrel who is cringing before him. C is vexed that the picture is so badly framed; the frame might have been made to suit those of the other pictures. And so we might vary their emotions endlessly. It is the same with the desires. A would like to paint such a picture; B would like to buy it; C would like to know the artist; and so on. This illustration brings before you the fact that in dealing with the feelings and desires we are often working in the dark; that, in other words, we cannot *teach* people to feel in a particular way and to have particular desires; that the word applies only to the perceptions, to stating what we see, to giving information. And hence a distinction has been laid down between efforts made to draw out the whole of human nature and efforts made to draw out the intellectual powers. The one has been called education, the other instruction. The distinction is an important one, and it is well to notice it. The teacher has instruction for his principal work. It is mainly through instruction that he is to educate, and hence his action on the child's mind is to a certain extent contracted and rendered uncertain.

After thus noticing the limitations of the teacher's work, let us now glance shortly at what he can do.

First, then, there is a wide field for the teacher's

activity in what is technically called discipline. The school is a little community; a miniature to some extent of the great body called the State, of which the young child is one day to be an active member. In this little community he may be disciplined into habits of punctuality, of regular and steady work, of respect for law and obedience to it, and even into love for his fellow-pupil, and affection for his master. Under this department of discipline, which is a necessary portion of a teacher's duty, much may be done to form character, and fit the child for doing his duty well as a member of the State.

But, secondly, the instruction which is given may be applied at every step to the educating of his whole nature. Instruction has been divided into two classes—educating and non-educating. There is a kind of teaching which fails to affect the emotional and practical nature in the way in which the subjects taught should affect it, and the consequence is that the child is not only not the better of it, but he may be much the worse of it. He may be taught subjects which would naturally appeal to his emotional nature in such a way that no emotion is roused, and the blank which is thus created is really a moral perversion. Hence the immense importance of the inquiry, What is the kind of instruction which is educative? This inquiry has been made with the utmost care by the Germans, and the principles may be regarded as clearly ascertained. I have before me three works on this subject, published within the last two or three

years: Dr. Ziller on Educating Instruction; Dr. Roth on Gymnasial Pædagogik; Dr. Schrader on the Doctrine of Education and Instruction for Gymnasien and Realschulen. All these treat minutely of how instruction may educate, and they are merely specimens of a large number of books which deal with this most important subject. The subject has not received with us the attention which it deserves, especially among the general public. And yet it is the one inquiry which will give a value to all our educational appliances. If we cannot make our instruction bear on the character and entire development of the pupils, then we fail, we accomplish nothing.

It would not be possible for me in this lecture to lay down in accurate detail the characteristics of educative instruction. But I may notice one or two.

1. It proceeds from individuals to groups. It is not a mere accidental taking up of subjects. But the teacher produces an impression one day which will be the foundation for a stronger next day, until out of the many, the pupil, through his own power, will come to make a unity. This is a natural process in the mind. If a child sees a tree one day, and another another, and a third a third, he soon comes to form some idea in his mind as to what a tree is. He may not be able to define it, yet he has made an induction of his own. And so in regard to a certain set of actions. He knows that this one is beneficial, and another and another; and he soon comes to select that which is really beneficial in

the various actions ; and though he may not be able to define it, he knows it, and in coming to this knowledge his mind is in full activity.

2. Educative instruction invariably awakens interest. If it does not do this, it is so far a failure. And it awakens this interest through its stirring up the feelings and desires.

Let us apply this to the education of the working classes. We have here to deal, be it remembered, with an early stage in the development of the human mind.

Now the subjects by which the minds of the pupils may be educated are two—the outer world or nature, and the inner world or the experience of human nature. The outer world furnishes us with materials which in their highest developments become the physical sciences. Are they suitable to the young child of the working classes? Unquestionably, if they are presented in a proper way, and in proper measure. It would be absurd to teach a child astronomy, or geology, or botany, or zoology, chemistry, or natural philosophy. The comprehension of any of these as a science in a scientific way is the work only of a very mature mind. A continuous survey of the phenomena and laws of any one science, and the acquisition of the power of making scientific investigations, are impossibilities for any but minds of considerable maturity and culture. But these sciences supply endless materials for arousing and sustaining the interest of children. Only the facts themselves must be presented—not mere accounts of them. The eye must be trained to see, and

similar facts must be presented, until the child, by his own powers, sees the similarity. Instances of laws must be presented in sufficient number until the child gains for himself a knowledge of the law. It is here that we are apt to make a great mistake, and give instruction which is not educative. The child must be taught to search out and discover. An abstract statement is valueless to him, if he has not personal experience of the facts from which the abstract proposition has been made; and the abstract proposition will remain mere words for him until he has realised it through individual instances and actual occurrences. And it seems to me that a teacher should, in laying out his plans, endeavour to interest the child in all the physical sciences, so far as his mind will admit of it. Every avenue to knowledge should be opened up. It is not multiplicity of knowledge that is to be given—it is multiplicity of interest; and if this is accomplished, the child's training, in regard to the outer world, is accomplished. Then we have the abstract of the external world in arithmetic and mathematics, of which I shall speak afterwards.

The inner world—the world of human experience—is the main subject of the child's instruction. The deeds, aims, hopes, affections of man; these are what will concern him all his life. We may divide this instruction into three parts.

1. The training of the intellect—the giving accuracy and distinctness to his notions—and from this enabling him to reason correctly. This work is accomplished principally through language. The boy

whose education ends at twelve must be content with a knowledge only of his own language. In learning it he should at every step be making progress in real knowledge. He should always learn the thing with the word. And much could be done here to give him something like a true idea of what is meant by many of the terms which are much used, but often little understood—such as order, justice, truth, religion. The meaning of these he must reach through concrete examples, just as in the case of the physical sciences.

2. There are the various crafts, if I may so call them, which are to be learned by practice—reading, writing, singing, drawing. These are mechanical, and have little educative power in themselves; but they may be of great importance as means.

3. Then there are the various groups which can more or less influence the character, as well as cultivate the intellect, when the external and internal combine.

(1.) Geography. This subject may be made powerfully educative. The child of the workman can learn well only the geography of the British Empire; but in learning it he might become impressed with many deeply important truths. If, while he is led over the country, he is brought to think of the rise and fall of towns, of the origin and progress of manufactures, of the secrets of success and failure, and the influence of site upon men and cities, his character might be vastly improved, and his interest strongly aroused. Only, again, we must give the concrete not the abstract, the particular not

the general. A fair, impartial, and full narrative of the effects of strikes upon particular trades or establishments would be worth cartloads of politico-economical exposition to a child. We have to produce impressions, not to insist upon the laws. The laws will arise with operative power out of the impressions—the impressions will never be got out of the statement or exposition of the abstract laws.

In dealing with the geography of the country, the child might be taught much in regard to the government and institutions of the country—always in the concrete—with much good to his mind and benefit to himself and the community.

(2.) History. Here, again, we have to give the full concrete and particular.

It is in the particular actions of men, either directly observed by the child, or related by those who have observed them, that the child will form his moral standard. And so, at this stage, history must take the form of minute biography. And it seems to me possible that in this way there might be laid out a course of such instruction likely to produce a profound moral effect on the child.

The child must also learn the history of his own country. But this should be written or told directly with a purpose—always truthfully, but still with an aim. Could not a child be taught to feel the value of toleration, the value of industry, the value of conscience, the value of obedience, the value of earnest religious conviction, and receive other such impressions, from many accumulated examples taken from British history?

And, finally, there is the teaching of religion. This is, of all subjects, the most important, and yet it is one to the methods of which almost no consideration is given. What is teaching religion? It is teaching men to love God with all their heart, and their neighbour as themselves. All religious teaching fails if we do not awaken love. It is not knowledge that is the aim; and all instruction that does not directly tend to bring into action love towards God and man is simply useless—nay, it is worse than useless, it is obstructive. This is too wide a subject to discuss here, but I shall quote two passages from Dr. Roth's book on *Gymnasial Pædagogik*, which will show how religious instruction may be uneducative, that is, not produce religion. "Those teachers who handle the subject in a systematic order," he says, "encourage their scholars to make syllogisms. 'All men are sinners. I am a man; therefore I am a sinner.' Now if the scholar thinks even so far, will he be awakened thereby to a longing for the forgiveness of his sins? Just as little as if you were to try to persuade a sick man, who has no desire to eat, that he is hungry. Far more likely the scholar, who has been brought to make the syllogism, will be set at rest in regard to his own sinfulness by the thought of the universality of sin."

And again he says, quoting an experienced teacher, "Assuredly at the examinations made by our youths at their departure for the university, they show so much theological learning, such deep glances into the secrets of the kingdom of God, so thorough an acquaintance with the Scripture, that I look back

with shame on my youth; but yet their belief in the existence of God, of the immortality of their own soul, is a matter of the utmost indifference to them. We can see nothing of a firm permanent direction of the heart to God; of a conscious morality of the heart based upon principles."

In giving this slight sketch of how a course of educative instruction might be planned, I feel that I have not done justice to my subject; but I trust I have said enough to show that the discipline and the instruction of the school may be powerfully used to bring out all the powers of the child, and to form character as well as train the intellectual faculties.

For this purpose, however, it is absolutely requisite that the schoolmaster be a man of considerable culture, possessed of insight into human nature, and especially young human nature, well acquainted with the best methods of training, and having a high aim for his own life and a noble moral tone in his own conduct. For here it is not the quantity of instruction that is of consequence so much as the quality, provided it be varied enough; it is not the amount of information given, but the interest excited; not the truths mechanically conveyed, but the living and abiding impressions produced on the soul. The teacher has really a cure of souls committed to him. Once find the right man, and he must be trusted in the discharge of his duty. He must be allowed to choose his own ways and means within certain limits; he must study the individuality of each pupil, and vary his mode of action accordingly; and he must have nothing to dis-

tract him from the great aim which must guide all his activity. And along with the good teacher we must have good inspectors, men of larger experience, of still greater culture and reach of thought. These should not watch over the teachers as if they were suspected characters; but they should be able to advise them in difficult cases, set them right when they pursue wrong methods, encourage them when they may despond, and help them in every way to carry out the true end of their vocation. With such a body of teachers and inspectors, the school might do a vast deal, in fact could not help doing a vast deal, to diminish the crime of the country, to ameliorate the condition of the people, to make the country better, and wiser, and happier. Now what does the Education Bill do in regard to the great aim of the school? There is no indication anywhere, except in the imposition of the Revised Code on the Scottish schools. The Revised Code states the results which teachers are to aim at. Let us look at them. The pupils may be arranged under six standards. These are—

| 48.         | Standard I.   | Standard II.  | Standard III.  | Standard IV.   | Standard V.   | Standard VI.   |
|-------------|---|---|--|--|---|--|
| Reading.    | Narrative in monosyllables.   | One of the narratives next in order after monosyllables in an elementary reading-book used in the school. | A short paragraph from an elementary reading-book used in the school.                    | A short paragraph from a more advanced reading-book used in the school.  | A few lines of poetry from a reading-book used in the first class of the school.                                      | A short ordinary paragraph in a newspaper, or other modern narrative.  |
| Writing.    | Form on black-board or slate, from dictation, letters, capital and small, manuscript.   | Copy in manuscript character a line of print.   | A sentence from the same paragraph, slowly read once, and then dictated in single words. | A sentence slowly dictated once by a few words at a time, from the same book, but not from the paragraph read. | A sentence slowly dictated once, by a few words at a time, from a reading-book used in the first class of the school. | Another short ordinary paragraph in a newspaper, or other modern narrative, slowly dictated once by a few words at a time. |
| Arithmetic. | Form on black-board or slate, from dictation, figures up to 20; name at sight figures up to 20; add and subtract figures up to 10; orally from examples on black-board. | A sum in simple addition, subtraction, and the multiplication table.                                      | A sum in any simple rule as far as short division (inclusive).                           | A sum in compound rules (money).   | A sum in compound rules (common weights and measures).  | A sum in practice or bills of parcels.   |

Now here there is next to nothing of educative instruction. The learning to read and the learning to write are mechanical operations. In learning to read the child is engaged simply in connecting an outward visible sign with a certain sound. In learning to write he is learning to indicate certain sounds by visible signs. The whole activity is external. As far as the Revised Code is concerned, the child need not understand a single word of what he reads or writes. The only educative power which the operation possesses arises from a defect in our language. Our signs are variable. The same sound may be indicated by different symbols; and sometimes the same sounds represent different thoughts, and are expressed by different symbols—in which case the child must learn the meaning to be able to give the symbols. But in all other cases the process is mechanical. If our language were like German or Italian, the child might be absolutely ignorant of the meaning of a single word; and if our alphabet were as thorough a system of signs as Mr. Bell's visible speech, the child might be able to go through the whole of the six standards in less than six months, instead of the six years allowed him by the Revised Code. "The appropriation of the language itself, as such," says Beneke, "having reference only to the external, produces immediately and by itself no mental gain." And this is repeated by all who have written on the methods and object of education. And so the money of the Government is actually thrown away. It accomplishes none of the aims after which a government should strive. It will not

diminish crime ; it will not improve the people. - It merely puts an instrument into their hands, which they may use for good purposes or for bad ; but it makes no attempt to guide them in the use of this powerful instrument.

There is a little more educative power in arithmetic, yet it is small. Arithmetic furnishes the pupil with models of clearness, precision, and certainty ; but the ideas contained in it are few. Indeed, the whole of arithmetic is a mere expansion of one and one make two, and one from two is one. That is all the idea that is in it.

But reading and writing might be so taught as to be educative. If, as should always be the case, the arts of reading and writing are taught with special application and reference to the ends for which they are acquired, vast spiritual benefit might be got. But here comes in the Revised Code, and presents a factitious end to the schoolmaster. The one thing he is to do is to make the pupils read and write and cipher, and the one end proposed for him is a certain amount of pay. Drive his pupils into the standards anyhow, irrespective of the full training of the mind, and Government will be satisfied. But what will be the result ? The interest in knowledge is destroyed, the individuality is neglected, the moral tone is overlooked, and the one power of learning to read and write, urged on by force, and accomplished mechanically, will very likely soon pass into disuse in many cases, and be lost, or be employed for the lowest purposes. And this has been in the main the experience in England.

The conclusion to which my whole lecture tends is that we ought not to have this Revised Code applied to Scotland. It will be detrimental to our education, and there is no fiscal reason for it. The money which Government is to give is not in Scotland to animate the zeal of voluntary effort. It is to supplement the local rates. And the inevitable result of its application to us will be to relieve the wealthy and to depress the poor.

Suppose, for instance, that in a wealthy parish a rate of one penny per pound produces an ample sum for educational purposes. In consequence of this the parish enjoys the services of a good teacher, and besides, the children, in consequence of the industrious habits of the parents, are better prepared for receiving instruction. Well, this wealthy parish will get more money from Government than another parish where threepence in the pound is necessary, where the children border on the criminal classes, where it is difficult to give instruction, but where educative instruction is most necessary.

It seems to me that the plan of distributing the public money in Scotland ought to be totally different. A minimum income should be fixed for all teachers, ample enough to get good men. Where the local rates, say at twopence per pound, and the fees, are sufficient to provide this income, the Government should give no aid directly to the school. But when a parish is poor, the income of the teacher should in all cases be made up by Government to the minimum, and the Government would thus step in where aid is really needed. Government should also pay

all the inspectors, and any other general expenses. I believe in this way less money might be required from Government than under the Revised Code, and the money would be much more wisely spent.

If I am at all right in this matter, Scotch education must for a time be cut entirely away from English. The Scotch board must regulate the education of the Scotch; and if this were the case, I think we should be able to show the English how much right aims and methods in education can do to make a nation prosperous, happy, intelligent, upright, and godly.

## LECTURE IV.

### THE RELATION OF UNIVERSITIES TO THE WORKING CLASSES.

The Nature of Man—The Function of the Working Man in Society—The Function of the Universities—The Exercise of the Knowing Powers—The Aims of the Universities arise out of these Powers—The Benefit accruing to the Working Man : Intellectual Liberty ; Greater Facilities for the Attainment of the Truth ; a Higher Moral State—Universities improve Teachers, Literary Men, Politicians, Divines, with great advantage to the Working Classes.

Does there exist any relation at all between the universities and the working classes ? And what is this relation ? Some people might feel inclined to foreclose the discussion of the second question by a negative answer to the first. We trust, however, in this lecture to show that there really does exist some, and that, too, a very important relation between universities and the working classes. But in so doing we have no desire to deal with universities as they now exist, nor to treat historically the actual influence which they at present exert. We shall rather suppose our universities such as they ought to be or might be. Nor do we use the word university in the sense in which it is now beginning to be almost exclusively used, as an examining and not a teaching body. In this lecture we assume a

university to be composed of men, all of them first, or among the first, in their own departments, representing as nearly as possible all the phases of scientific and literary pursuit of truth, and willing to communicate the results of their studies and investigations to youths fit to receive their instructions and to continue their work. With this explanation we proceed at once to the subject of the lecture.

The first thing we have to do in the discussion of this question, is to ascertain the position of the working man and that of the universities in the object or purpose of human life.

We suppose that the remark is almost needless, that man has been made for a purpose. Every part of the body has been made for a purpose. We know that the eyes have been made for seeing, the ears for hearing, etc. If every part of the body is thus made with a special object, is it not likely that the body itself is made for a special object? and if the body is made for a special object, is it not likely that the whole man, body and soul, is also made for a special object? Now this special object we must know before we have any chance of determining aright any procedure with regard to man. If we do not know what man was made for, we do not know why we live. We cannot train a person aright, because we do not know for what he is to be trained. We cannot employ him rationally, unless we know what he was made for. For what, then, was man made? Now we answer this question in two ways, according as we look to man himself or to his Creator. Looking at man himself, we say

that he was made for *living*. By *living* we mean the active, healthy exercise of every faculty or power on a worthy object to the full extent to which it ought to be exercised for the particular moment. Thus the body of man performs its function in creation when every part of it is in full and vigorous health, and when it is employed in some kind of activity suitable to its powers. If any part of it is not inclined to work, then the body is so far diseased. And if beyond this there be a part over which the man himself has no control, and which will not and cannot do its work, then that part is dead, and the body so far partakes of death. It is important to notice these three phases: life, or vigorous activity; disease, or impaired activity; and death, or inactivity. For these phases present themselves in all the portions or faculties of man's nature, but they are easily distinguished only in the body. We pass from the body to the knowing powers of man. Now here the knowing power of man is alive, when man personally and individually uses his power of knowing to know for himself things which it is suitable for his nature to know. Notice that we say that he is to know it himself. If he depends on others for his knowledge, and takes it on trust, he is so far not fully exercising his knowing powers. They may be in a diseased state or in a state of death. If he takes his knowledge from others, and does not understand at all what he has received, but is deceived by words, or if he does not exercise his power of knowing at all, then his intellectual powers are dead. If he takes it on trust, but to

some extent appreciates the knowledge which he receives, then he is in a state of disease, struggling on towards life, but not fully living, not realising the full amount of vitality of which he is capable. Then we pass from his knowing powers to his emotional nature, his powers of love, fear, hope, admiration. These are brought into exercise by the presentations of truth which he has obtained for himself, or which are made to him by others. If he loves what ought to be loved, hates what ought to be hated, fears what ought to be feared, and admires what ought to be admired, then his emotions are in a healthy state. But if he is swayed by base passions, hating what is lovable, and loving what ought to be hated, he is in a diseased state. And if he does not admire when he ought to admire, does not love when he ought to love, is not touched by feelings of compassion and sympathy, his emotional nature is so far dead. And, lastly, man has been endowed with a will. He is in all cases to choose the good and reject the evil. If he has complete control over himself, and obeys the dictates of reason, or, in other words, if he consciously lives for God and not for his lower nature, his spirit is living, his moral nature is sound. But if he fails to exercise complete control over his actions, if he fails to direct all his actions according to God's will, and is misled into actions contrary to what he knows to be God's will, then his spirit is diseased, it may be struggling for life, but still diseased. And if he abandons himself to his own selfish pursuits, disregarding his Godlike

nature, forgetting that he was made to show forth God's character, if he becomes insensible to the heavenly dignity of his calling, and is pervious only to the narrow motives of this earth, his moral nature is dead.

We have made this general survey of man's nature because it is essential for our purpose. We may remark further here that we have not said that man was made for happiness. We do not believe this. We are sure, indeed, of this, that happiness follows the healthy activity of every part of man's nature. We all know what a pleasure there is in full, vigorous health of body. It is the same with the other powers. Man is capable of deriving the keenest pleasure from the exercise of his intellectual powers; and this pleasure is constant and great in proportion to the healthiness of these powers, that is, to full individual outstretching of them on worthy objects. The emotions also bring the greatest pleasure when they are healthily excited. And man can never reach true lasting happiness unless he dedicates all his powers to God. For, viewing man's creation from the Creator's point of view, we may affirm that man's living was intended to show forth God's living, that man's great work and function on earth is to strive after likeness to his Creator. The greater the likeness, the higher does he rise in the scale of being. Therefore man cannot employ his powers on worthy objects unless these objects be those on which God meant that he should employ them. It is only by following God's will that man can attain or approximate to complete health, and therefore complete happiness. And this will must be set before his

mind as the supreme aim of his life. If he determines to seek happiness first, if his great motive be to arrive at a state of supreme delight, the very selfishness of the motive blasts the whole prospect, introduces a canker into his most earnest endeavours, and he must fail. It is only by doing our work, by thinking of God and his will, that we can reach the highest glory of man. It is only when we lose sight of happiness altogether that we can by any possibility attain it.

We have now got our general view of human life. In what part of it are we to set down the work of the workman, and the work of the universities? Let us notice, then, that it is a most wise and beneficial arrangement that man cannot attain perfection alone, that he is and must be social. Even in regard to his body he could not attain perfect healthy development alone. At least he is in the best conditions for attaining it when he is surrounded by multitudes of his fellows. His knowing powers would absolutely vanish into something not much above the brutish, if it were not for his connection with his fellow-men. His emotions find their principal exercise amongst his companions, and his godlike nature is displayed principally in his conduct towards those around him. Man is most emphatically a *social* being.

Now the work of the working-man, and the work of the universities, both have their origin in this sociality.

The work of the working-man relates to the body, the work of the universities to the knowing powers of man. We shall look into both more narrowly. We have said that the main business of man with

his body is to keep it in perfect health, that is, in a fitness to do any work appropriate to its nature. This is looking at man himself. In regard to his fellow-men, his business, or rather his privilege, is to present himself as beautiful an object as he can possibly be. This beauty is the result of his perfect health or vitality. And, lastly, the Creator has determined that the race should continue on earth by a continual propagation of individuals. We may dismiss the last of these as having comparatively little to do with our subject, and direct our attention to the other two—the maintenance of the vitality and beauty of man. Now it is conceivable that a man himself might be able to procure sustenance for himself without the help of others. And he requires to do nothing, absolutely nothing, for the exhibition of beauty, since the human body itself with its marvellous symmetry and innumerable graceful curves is the most beautiful object in creation. In the course, however, of man's progress in civilisation, it has been found expedient to subdivide labour, and accordingly a certain class are specially employed to cultivate the ground, to turn the products by boiling and cooking into articles of food, to provide shelter in the shape of houses, and to produce all the conveniences of locomotion calculated to bring these articles of food or of shelter to others who are not similarly engaged. Then, at a very early stage, man was not content with the beauty of his body, but wished to ornament himself, and hence arose dress. Dress may be now a necessity as well as an ornament, but there can be no doubt that historically it was principally

intended to decorate and set off the person. And, indeed, yet we generally recognise dress to be an ornament, at least the outer coverings of men and women are looked on as such. The working-man or working-woman is employed about all these articles, and his function in the object of life, as far as he is a working-man, ought to be, either to promote the vitality or health of human bodies, or to set off their beauty. This is not, however, exactly the part which he plays in this world. For mankind have not generally taken an ideal view of human life, and the working-man has to submit, or, at least, has submitted, to the necessities of the case. For he has been employed, invariably, not to supply the just wants of the community, but any material wants whatever which they may have. He does the work which he is ordered, and asks no questions. I shall make my meaning evident by putting a question. Is a working-man bound in the performance of his work to see to it that he really does help forward the vitality of man? Here, for instance, is a confectioner. He makes a vast quantity of sugar cakes, ratafia biscuits, and such like, which, in all probability, will do injury to the stomachs of those who take them. Is he responsible for the mischief which his products will cause? Here, again, is a man employed in making whisky. He knows that his drams will probably go to the heads of many men, and drive them into acts of folly or madness. Is he responsible to any extent for the results of his activity? Here again is a shoemaker. A scoundrel comes to him and orders a pair of boots. The

shoemaker, if he thinks for a moment, knows that the scoundrel will use his boots, and will no doubt be considerably helped by the boots, if they are well made, in the perpetration of some crime. Is the shoemaker responsible? Now, the answer that mankind has generally given to this question is, that the workman is a mere tool, that he is not bound in any way for the use or abuse of what he makes. All that is expected of him is that he be *honest* in the performance of his work. The working-man does, indeed, perform a very important function in the great community of man, but that function is not one which demands from him the exercise of great moral powers, or great powers of discrimination. In the exercise of his vocation the workman has to follow some simple rules of art. He is not bound to inquire into the reasons for these rules, he is not required to think of the nature of his occupation or the destiny of his work in the social whole. His work lies in a round of daily regular employment of the hand, with comparatively little of the head, and what there is of headwork is the application of well-known rules. Thus a shoemaker knocks the tacket into the boot by means of his hammer, without any curious inquiry into why the hammer should be able to make the tacket penetrate into the leather. He does not require to trouble himself about the laws of force. There are, indeed, great differences in this respect in regard to the occupations that relate to the body. Thus the tea merchant in London and the Chinaman who picks the tea leaves off the plant, are both engaged in the same service to

humanity. But the mind of the Chinaman is scarcely occupied at all in his work, while that of the tea merchant has to grasp various details, watch various social phenomena, in fact, may be very fully and worthily occupied. Again, the butcher who kills a calf and sells it as meat may contribute very materially to the sustenance of human life. But there is no great stretch of mind required for his occupation. While, on the other hand, the doctor who endeavours to restore diseased bodies may have to deal with a multiplicity of mental processes, and therefore require to exercise his mental powers to the full. The persons, however, who are engaged in those professions relating to the body which require thought are not generally called workmen. It may be affirmed, therefore, that the products of the working-man are essential to the maintenance of man's being, and may become externally promotive of man's well-being, that, as far as the individual worker is concerned, however, the employment is not calculated to draw out the whole activity of his nature, that it may materially help his physical well-being, that it does almost nothing to draw out his knowing powers, that it affords comparatively little room, therefore, for the full development of the emotions, but that it can be done in a spirit of duty, and therefore opens up a field for him for bringing his moral nature into activity.

We pass now from the working-man to the universities. Their especial work is in connection with the knowing powers of man. We must look at them somewhat minutely. A very strange and wonderful

phenomenon presents itself here. We go out into the open fields and look around us. We see a house a hundred yards off. It seems to us that we see a house, that the house is the same size whether we stand near it or far from it, and that we really see that there is a considerable distance between us and the house. But it is well known that we do not see a house and never can see a house; for that the object we see is a house, is an act of judgment on our part, and not a revelation of our sight. We know, moreover, that though the house may now appear to us at the distance of a hundred yards to be of the same size as if it were at the distance of three feet, yet our eyesight tells us exactly the opposite, and that we are correcting the apparent illusion of the eyesight by an instantaneous act of judgment. And, lastly, our eyesight gives us no idea of distance. Let us again look around us. We affirm from our eyesight that the earth is flat, that it stands still, that the sun is not larger than a cheese, and that the sky is above us. This is the apparent statement of eyesight to us. Yet we know that the earth is round, that it is moving at an incalculably great speed, that the sun is of an altogether inconceivable size, and that the use of the terms "above" and "below" in this vast endless universe, arises solely from our making ourselves the centre of our thoughts. Here, then, we see that first impressions are almost invariably, I might say invariably, delusions. In the strictest sense of the word, they are not delusions, but facts of immense practical importance for us. But as soon as we apply our powers of knowing to

them, then we find that we have supposed we know something more than we really did know. In truth, the whole of nature is, as it were, covered with a veil, and the Creator has allowed man the privilege to uncover, by slow degrees, this veil, and get a sight of the marvellous harmony, exquisite order, universal law, which prevail in a world, which, according to first impressions, is endlessly varied and distractedly irregular. God has presented to the knowing power of man the universe in the shape of an enigma, and every effort that man makes towards the solution of that enigma exalts him in the scale of being, makes him capable of a wider and nobler happiness, and fills him with larger prospects.

Now in the healthy exercise of man's knowing power, look how he has to act. He has to stand in the midst of innumerable impressions rushing on him from without, and say, "I shall not be overpowered by these impressions. I shall watch every thought and observation minutely. And thus through hard struggling and resolute thoughtfulness I shall reach the truth." He starts, therefore, in this search after truth with the determination to doubt everything. The facts of experience he will, like other men, receive as facts of experience, but as nothing more. What he wishes to do is to go beyond these facts, to penetrate into the laws which underlie them, to get at the thoughts of the Divine mind. He therefore starts with doubting everything. The whole of the truths with which he has hitherto become acquainted he may value highly. He may deem them so handed down to him as that

he feels bound to act on them. But now he sets out on a new career. He is henceforth not merely to know *about* things, but to know things, and at the same time to know his own ignorance. Therefore he calls all things in question in his mind. And he looks about him and examines and thinks, until he finds some reason or reasons why he should adopt such and such a thing as an unquestionable truth. The man's entire knowing powers are called into vigorous exercise, and his beliefs are no longer a bundle of ill-assorted opinions gathered from all quarters, but a personal, realised, coherent result of his own intellectual faculties.

In investigating the field of nature in this way, the searcher for truth has to observe with the strictest fidelity, and to store up in his memory his observations. After he has gone on doing this for some time, he then proceeds to call his full faculties into play. As yet he has got only a multitude of individual observations; but now he goes in search of the law which connects these, and the order which pervades these. He tracks the thought of the divine mind in the creation of the forms and phases of matter, and thus finds full occupation for his powers. It is astonishing to think how wide a field the Creator has provided in inanimate and brute nature for the calling forth of the intellectual powers of man. Everywhere there are problems which he is invited to solve. Now it is noteworthy that it is seldom, in fact never, given to one man to solve these principal problems alone. They are exercises for mankind, not for one man. It is the race that

solves them. One man observes one thing, another another. The observations increase. Then ideas are applied to the solution of them : and gradually nearer and nearer do people come to the truth, until, in the appointed time, one or several of the greatest minds of the age unveil the truth itself. After this the truth discovered is of great value to mankind, but of still greater value is the knowledge of the mode of the discovery. Thus it is well to know that the earth is round ; but if one simply know that the earth is round, his knowledge is a very poor thing indeed. It is not until he knows the reasons of it, until, through knowing the reasons, the fact becomes a fact well assured and certain to him, that it is his knowledge. Formerly it was but the knowledge of some other body's put into him.

The investigations into the physical universe are exceedingly useful : first, because they really bring into full exercise the knowing powers of man ; and secondly, because they throw considerable light on the methods which we are to pursue in the more intricate problems which occur in the study of human nature. These problems are the most important which man has to solve. The great and essential work of man is to know himself ; himself in his individuality, in his relation to others, in relation to the external world, and in relation to God. This is a task of tremendous difficulty. He has to be on his utmost guard lest he be deceived by current opinions, lest he be misled by words, lest he be hasty in his generalisations. He must think much, and think profoundly, examine all varieties

of facts; and then he must lay hold of his idea, that by means of it he may group together his facts, and connect his scattered opinions into one living-whole. He has to watch the individual man, his thoughts, his modes of activity, his impulses, his desires, his moral life. He has to advance from this into the facts of social life; and he has to attempt to grasp the relations which man individual and man social has to God. Here is the great field for his investigation of truth. Now I say that it is especially the work of universities to present, in realised and living power, the results of all previous investigations into the truth, and to advance the limits of true knowledge by continued personal investigation. A university should have for its teachers men who have resolved to dedicate themselves purely to the search for truth. The pupils should be either men who are to be successors in carrying forward the investigations; or our teachers, who are to affect the minds of the rising race; our law-makers, who are to legislate for them; our literary men, who are to expound in appropriate dress the truths which are brought to light; and our teachers of religion, who are to turn the minds of men to God. All those who undertake to guide men in intellectual or spiritual matters should themselves be thoroughly imbued with the right spirit of investigation, with a desire for true knowledge; because they cannot affect men wisely and with real success unless they themselves have full vitality in their knowing powers.

The aim, then, of our universities should be threefold: First, they should awaken and keep up

a desire for real knowledge. They should rouse each individual to an independent resolute search for truth. Secondly, they should be of essential use in enabling him to get hold for himself of some central ideas, by means of which light and unity are thrown into the most manifold minutiae of a subject. This is a very important point; for unless a man is able to get hold for himself of some such central ideas he must be continually inconsistent. And if he has any life in him at all, his inconsistencies will be very apparent; or if he is dead, he will hide them under an adherence to formulas acquired through tradition, which he does not understand. And, lastly, universities should afford to the students the means of coming to the best conclusions in the circumstances of the age. They can do this only by presenting to the minds of the students the various endeavours of all great minds in the solution of the same problems. For it is to be noticed that the ages are all linked one with another; that this nineteenth century is the result of all the previous centuries; and that its problems can be solved only by the most earnest consideration of the modes in which previous centuries attempted to solve them, by a thorough personal knowledge of previous successes and failures. Nay, more, the student in a university should be made to feel that he ought to be better than those of a previous generation. He ought to see farther, because he stands on the shoulders of his forefathers. He should therefore feel it a duty thoroughly to know what has been accomplished by previous thinkers, and by the

light of their hard struggles to penetrate still farther into the realms of true knowledge. In order to accomplish these great objects, the students of a university must have a special training before they come to its peculiar work. This special training must be found mainly in languages; for the accurate interpretation of human speech, and the knowledge of previous human ideas, are the special requisites. The languages of Greece and Rome are peculiarly adapted for the purpose, for two great reasons. The total difference between the ancient modes of expression and the modern compels the student at every moment to think before he can ascertain the meaning. And thus his attention is arrested, and made to dwell on the thoughts that are presented. And then the thoughts of these writers are at once widely different from the prevalent modern thoughts, and they are at the same time such instances of fresh, original, personal searchings for truth, that the whole faculties of the young reader are stirred up, and yet they are not overpowered, as they would be by the perusal of our great English writers at an early stage. The mind is thus kept occupied, and yet it is not hurried on. After he has gone through the preliminary training, with as yet no problems regularly solved, the student comes to the university in full vigour of his powers; and with all the devotion of a soul yearning to know the truth, he begins to apply his mind to the investigation of the most important questions that can agitate his mind. His only hope of being able to come to fair independent conclusions is, that he

reserve his judgment till a ripe age, and that he form his judgment with an independent knowledge of the history of the human race, and of the thoughts of the best thinkers.

This, then, is the work of universities. It is to foster the individual independent search for truth in the circumstances most calculated to make it successful; or, in other words, it is to foster the highest vitality and full life of the knowing powers of man.

Now we have seen that the occupation of the workman as such does not in any degree call forth his knowing powers; that, on the contrary, from its routine character, and its procedure by rules, it would make man a mechanical machine, were it not for the idea of duty which it calls forth. We have seen, at the same time, that if man is to be fully alive, he must exert his knowing powers, he must make the resolution to think for himself. Yet how can the workman do this? He is certainly placed in very unfavourable circumstances for the full development of his nature in this respect. He is taken away from school at an early age. A boy of ten or eleven years cannot form intelligent opinions on any important matter for himself. If the education stops here, then the boy will grow up into a man full it may be of likes and dislikes, of prepossessions and antipathies, but he will not have one rational opinion of his own. He will be a thorough slave, guided and swayed, not by reason, but by blind impulses, perhaps by the cunning craft or impetuous passions of thoughtless or designing men. It is here that the work of universities comes in. If

there exist in a country a body of men who devote themselves to the independent individual search for truth, the life which is in them will communicate itself to the others. It will descend from them through various grades of intellectual capacity, until it reach the very lowest. For spiritual life is creative of spiritual life. The love of truth propagates itself. Life creates life. The universities ought to be the brain of the community. They should be the representatives of the nation in showing to what extent it is capable of investigating truth. And if they are such, their influence will extend to the whole nation. Now this is a great matter; for, as we have seen, a man loses a large share of *life* who has never had his intellectual faculties roused to resolute independent thought. And with the loss of this life, he loses to the same extent a capacity for real and lasting happiness.

The function which a body of truth-seekers has to perform in a community is beneficial in a thousand ways besides the simple propagation of intellectual life, mainly, indeed, because the propagation of intellectual life brings a multitude of blessings, and many of these blessings come directly to the workman. We shall notice some of these benefits. The first and most direct result is the establishment of the true idea of liberty of thought. The man who seeks for truth claims the right to think for himself. He says to himself, Here am I, placed in this world of mysteries, with a separate individual existence of my own. What is my duty? I must grapple with the difficulties. I must deliberately form my own opinions, with the feeling that

I am responsible only for the right use of faculties which God has given me, and the opportunities which he presents to me. My faculties may be too weak to reach the whole truth. My opportunities may be few, but I shall not for that reason cast myself down at the feet of any of my fellow-beings. I shall exert my own individuality. I shall form my own opinions, and I know that I shall be judged, not by my success in attaining the truth, but by the earnestness and devotion with which, in simplicity of heart, I seek it. When the seeker for truth thus speaks to himself, he lays claim to a privilege and birthright of man. But it is to be noticed that it is only the man that has the right spirit in him who will readily see that the same privilege is to be freely allowed to all. The truth-seeker is making a strong and vigorous effort to reach the truth. In this effort, he realises the fact of his own weakness and ignorance. He sees that he never can comprehend the whole truth. How could he? What is truth, but a knowledge of the Divine Being? And how is it possible that a finite being should ever reach the full knowledge of the Infinite? Nay, he feels as he goes on in his search that the farther he penetrates, the more does he become conscious of his ignorance, the more does he feel that there is an infinite distance between him and the Creator. He therefore knows well he will never know the whole truth. He will be able to know only a very small portion of truth. Others may be able to penetrate farther. Let all work in this great activity of the knowing powers, for it is intended that all should

work. There will be infinite diversity of results, because the individualities who go in search of the truth are endless. And he has made up his mind to think no evil of any one, whatever conclusions he may come to in the earnest search for the truth. Nay, he believes that truth must ultimately prevail, and therefore all he demands from men is, that they be earnest in the search for it. Now we are sorry to say that this is a belief which is very far from having got hold of most minds in this country. In fact, it cannot get hold of minds that have not made a living use of their knowing powers. The man who has received his opinions from his forefathers, or who swears by the opinions of his teacher, his political club, or his minister, has been unconsciously led into the stagnant belief, if we can call it a *belief*, that his forefathers, or political club, or teacher, or minister, are infallible, that the whole truth has been discovered by them, and that any one who ventures to differ from them is either a fool or a great sinner. The whole passions of his nature are roused in behalf of these opinions; distortions and deceptions mislead him on every hand, and he lies chained under them, because his intellectual powers have never been roused into life. He never can be truly conscious of his ignorance. He has never asserted the freedom of his individuality, and not only does he hug the chains of the slave, but rages in wildest fury against the man who dares to be free. This death of the intellectual faculties was and is the cause of the great majority of persecutions for beliefs. The men who persecuted were often far from bad men.

Nay, they frequently had a great zeal for God. When they burned the martyrs, they imagined that they were offering a pleasing sacrifice to the Divine mind. They were *absolutely sure*, they could not venture to doubt, that they were in the right and the martyrs in the wrong. Having never searched for their own opinions, they could not see why the martyrs should. New light was hateful to them. So it is in the present day. There are many men, who have never earnestly thought for themselves, who would persecute to the utmost every one who ventured to differ from them. They do that from *ignorance*. They are more to be pitied than to be blamed. They need to be rescued from their slavery and deception, not to be cursed for their intolerance. Now, I say that it is only by fostering a determination on all hands to search for the truth by one's own individual powers, and on the impulse of one's own individual conscience, that this intolerant spirit can be exorcised.

Workmen, like most men, stand in peculiar need of this intellectual life and freedom; for they may be divided into those who accept their opinions purely on impulse and from others, and those who make an effort to have opinions for themselves. In the case of the first class, there is the most pressing necessity that every means should be used to rouse them from their irrational state. It shuts out from them some of the purest enjoyments, it mars the beauty of their manhood, and it may turn them on any occasion into tools for the perpetration of the wildest crimes. There is nothing so fearful as a

mass of men who are ignorant of the principles of true liberty of thought, goaded and driven on by leaders equally ignorant. It is no matter on what subject the intolerance may manifest itself. It may be religion, it may be politics, it may be small beer. The numbers act on each other. The rage and fury swell beyond bounds; and how can reason be of any power in the case, when reason has been lulled into a death-like sleep? No; the fury spends itself in fearful devastations, and the madness is seen to exist only when its fury has abated, and the ruins it has caused present themselves to the eye on every side. Again, when working-men do resolve to form opinions for themselves, it is only truth-seekers that will appreciate their efforts. They have to form these opinions with very inadequate materials, and in very disadvantageous circumstances. The consequence is, that the opinions are often outrageous to the common view. The truth-seeker who has examined the history of human opinions and the nature of the human mind knows that it cannot be otherwise. He will not frown on the candid infidel, or the socialist, or the secularist. On the contrary, he will often see that such opinions are the fairly expected results of the circumstances. If this spirit were to pass from our universities onwards to the people, many a man who is now looked down upon for his extreme opinions, and often deserted by society, would be praised for what he has honestly done, and would be guided into doing a great deal better.

And there is this other great positive advantage

which active, genuine universities would afford to workmen. They would give them the means of forming a much better judgment than they can do where there is not a body of men engaged in the pure search for truth. For, as we have said, every one who honestly seeks for truth helps forward the truth. This is a very important law in God's scheme of the world. A truth never becomes permanently established until every form of counter-theory has been tested and found wanting. And God has evidently given us different individualities that men might seize various sides of the truth, and by exaggerations and distortions of it display the consequences and weakness of error, as well as the consistency and blessings of truth. There is also this peculiar law in regard to the acquisition of truth, that the more important the truth, the greater are the struggles which it has to go through before it is permanently established. And they who attempt to establish the truth often do not deserve more praise than those who, in the midst of obloquy and reproach, attempt to overturn it or modify it. It will be a long time before our communities will feel this thoroughly. They find it difficult to believe that a man who is in error can be serving God's purposes. They find it difficult, for instance, to realise the fact that the antagonists of Christianity have often been more useful to its progress than its defenders. Yet so it has been. The heretics of the church have helped to place many truths in a clearer light. We are not pronouncing any judgment on the heretics themselves. God is their judge. It is

our business to notice that God intends all honest thinkers to be of real service in building up the temple of truth, and it is our duty to give all honest thinkers the amplest opportunities for working out the work which they are evidently fitted to accomplish. Now, if this principle were thoroughly carried out in our universities, look what advantages would accrue to all classes. We should have every phase of truth discussed in the fullest freedom by men most fitted to discuss them. All the arguments for and against a belief would be candidly brought forward by men of the highest abilities but of different temperaments. The workman would have the results of their investigations in some shape before him, and by means of them he would be much better able to choose his opinions and to decide for himself.

Then, again, all these investigations into truth lead mankind gradually to a nobler moral state. They are important means in the training of man for self-government. This is a point upon which I can merely touch. All these investigations tend unquestionably to fix in the mind the idea of law and the idea of the certainty of some moral laws. Now I maintain that if we could get into our minds the feeling of the absolute certainty of God's moral laws, we should not violate them as long as we were sane. Look, for instance, how we act in regard to physical laws. Men do not drive their heads against lamp-posts. They do not slash at themselves with knives. Why? Because they have a firm, unwavering belief that certain consequences would follow.

If they could have the same absolute certainty in regard to moral laws, they would act in the same way. If a man believed that the inevitable consequence of a lie was a deadly injury to his own higher nature, would he ever tell one? We say no. It would indeed take a long time before the human race would learn righteousness in this way. And happily a shorter one has been revealed to us. Christianity presents a ready cure for moral death to all men, however low their intellectual powers may be. It performs the cure through love and life, not through investigations after truth. But Christianity is avowedly an extraordinary and supernatural remedy. And we should not therefore blind ourselves to the fact that the advance of real knowledge, of the spirit of manly individual investigation, in the course of which alone the mind gets the idea of law impressed on it, is a worker in the same cause as Christianity.

I have as yet confined myself to the effects which a body of genuine truth-seekers of the highest abilities and with the fullest liberty would have amongst us. These men themselves, however, would seldom come in contact with workmen, and they would not often make themselves very intelligible to them even if they did. Accustomed to the search for truth, accustomed also to hang all their ideas closely and resolutely to the central idea, they are not often well fitted to make their own investigations clear to minds not trained to the same habits of connected thought. But they directly influence the minds which directly influence the workman. They ought

to influence the teacher of the workman, the law-maker, the literary man, and the preacher. All of these come more or less in contact with the workman, and through these the men who devote themselves to the investigation of pure scientific truth will wield a powerful influence on the lot of the workman.

I shall therefore show what influence universities may have in this way.

I begin with the teacher of youth. The work which he has to do is unquestionably an art, not a science. But it is evident that his art will fail considerably, if it is not enlightened by scientific investigation. He has to deal with living beings, he has to educe and foster intellectual *life*. Now he cannot do this, unless, in the first place, he knows the laws by which intellectual life is educed ; and, in the second place, he must be utterly unable to educe life, if he is not living himself, if his intellectual powers are in a state of death. Hence the necessity that there should be some men who should especially devote themselves to the investigation of the object and methods of education. The subject is a profoundly difficult one. The nature of a child is one hard to understand. The methods in which his faculties are developed are not easy to ascertain. The man who attempts to master these thoroughly must be able to analyse the most delicate processes of the mind. He must at the same time guard on every hand against his being misled by appearances. He must know human nature well, as it has shown itself in all ages and stages. And in order that he

may develop the whole child, he must know every phase and faculty of human nature. Above all, there is an absolute necessity that he settle clearly for himself the end and aim of education, lest any subordinate part receive too great attention, and that all the means in use may really accomplish the end which God wished. Only a first-rate man with large command of time and great acquirements can accomplish a task like this with success. And such men there should be in every great community. For if the subject is not thoroughly discussed, the errors that will be committed will be enormous. In this country especially, where so much depends on the people themselves, is it necessary that there should be some men set apart to investigate the laws of education; for there never will be thorough education until the people know what good education really is. Parents must learn how their children can best be trained, our politicians must have clear ideas about education, before we can hope for those external arrangements in schools or colleges which often help greatly to the success of the education.

After all, however, it is the teacher that makes a good school. Every national system of education should have for its first great aim, that the teachers should be as good as possible; and for its second, that the teachers should in no way be hindered from exerting their fullest living power on their pupils, that they should have the fullest appliances for carrying out their work. If there is to be any true education at all, the teacher must have investigated the nature of boys in all its extent. It is therefore

essential that he should come into contact with men who have devoted their lives to this study, who have amassed the observations and thoughts of previous generations, and who are spending their days in extending the limits of true knowledge on this matter. But it is not enough that he study this department. He should be a thoroughly cultivated man. He should be a man whose knowing powers are in full vigorous life. For the essential aim of education of the knowing powers is, as I have said, to make a man think for himself, to enable him to come face to face with truth, to cast off the bonds of tradition, and assert for himself his own humanity and individuality. Now a teacher can never do this who does not think for himself, who is not himself making progress, who is not eager and earnest in his pursuit of truth. For really a teacher uses a more powerful influence on the pupils by what he is and what he does, than by what words he utters or what information he gives. It is the unconscious *life* in a man that most influences all of us. And I have not the slightest doubt, that every teacher communicates to his pupils a very large amount of himself, of his own spirit, of his own character, of his own life. If he is dead himself, he communicates death. He drags his pupils through endless bits of routine, drugging their memories with unprofitable facts, making them read and commit to memory without once introducing them into living contact with the thoughts, without once arousing their whole intellectual natures to activity. Take these pupils out of their narrow rut and they are helpless, staring in

utter vacuity at the possibility of comprehending a thing. Such a mode of procedure, frequent as it is, unfortunately in our schools, though it is not so frequent as it once was, advantageous too as it may be for shows and examinations, and well calculated as it is to deceive ignorant parents into raptures of applause, is ruinous to the young souls, dries up every bit of life that is in them, and sends them forth into the world with their noblest tastes choked, their noblest aspirations withered, their life exhausted, mechanical, dull, self-conceited, persecuting men. How different are the results when 'the teacher is a man who *thinks*. I shall sketch one of the right kind, who may be known to some of my readers, a teacher full of real genuine life, with most of this living power of any teacher I know. In his early days he studied theology with all the earnestness of an earnest soul. He then threw himself heart and soul into the noblest modern literature, the German. He studied history, one portion of it especially, with exhaustive profundity. He betook himself to the rising science of education in Germany with a healthy mind. And now he devotes himself resolutely to independent researches into the art, the religion, the politics of the ancient world. He has his heart open for every yearning of humanity. Every noble sentiment finds an echo in him, and he pours forth his feelings in absolute confidence that his pupils will not think the less of him for appearing a fallible man. Such a teacher awakens within his pupils every kind of life. He opens up to them every field of human study, he inspires them with enthu-

siasm for everything great ; and long after they have passed from his presence, the seeds of thought bear fruit, often enough it may be in forms different from the fruit which appears in him, just because life is endlessly varied. Now I maintain that the workmen should have living thinkers of this stamp for teachers. They need all the life that can be awakened within them, and they are not educated at all if they leave the school without this life. And such teachers we cannot have without real universities.

We turn now to literature. Literature is the food of the workman after he has left school. It continues the educational process. The literary man does not deal with pure scientific truth. His function is somewhat different. The purely scientific or university man seeks simply for laws, for harmony, for what we call the naked truth. But in this world there is no such thing as naked truth. God has enclosed every truth in a shape of beauty. He has surrounded every reality with a dress appropriate to it, and it is the aim of the literary man to present the truth as it is thus surrounded. The whole range of the emotions comes within his sphere. He does not go in search of the truth merely, he wishes to feel its power, to be swayed by it, and to express its beauty, its greatness, its influence among men. This seems to me the grandest work of all, for it is most like God's work. If the literary man is one who can combine the most indefatigable search for truth, the most independent and resolute thinking, with the power of clothing the truth in the most appropriate language, unquestionably he accomplishes the

greatest intellectual task. But it is seldom that the powers of strong independent research, and of exquisite and full exposition, belong to the same individuals. And in general, it will be found that the literary man, the man gifted with the power of expression, has not an absorbing longing for abstract truth. Now what I affirm is, that literary men, as they are the instructors of the people, should have a thorough training before they enter on their work. Literary men should in every case come in contact with the men who have devoted themselves to search after truth, for they are the mediators between the people and the truth-seekers. And if they do not know what are the truths discovered, if they have not to some extent made the resolution to think for themselves, if they have not had time to work out their belief into a unity, they will often teach error when they might be teaching truth, they will often clothe prejudices and mistakes with the garments of truth, and they will lend their powers to the crushing out of the best life of man. Moreover, there is this fact also to be noted, that the acquisition of the literary power has often the effect of extinguishing the faculty of forming an independent opinion. If a young man betakes himself to diligent cultivation of style before he has got thoughts, it will be found that he will attain the power of saying things well, but that he has not the power of forming opinions. His opinions must be borrowed. He will often be deceived by words. And hence arises a vast deal of literature which can do the reader no good. But on the other hand, the young man waits patiently,

if he is trained to patient, laborious habits of investigation, his literary power will bring home to the mind the noble thoughts that burn within him. He will remain fresh during life for the reception of new truths, and he will foster among all a love of truth, a spirit of toleration, charity, and reverence. Now I see no reason why we should not have such literary men. They would be an immeasurable blessing to workmen. But they can be only if we have real universities.

Let us look now at the use of universities in regard to politics. It will be granted by all that there are certain laws which regulate our social system, and that there must be an ideal mode of government which is best adapted to the wants of human nature. Now it seems to me that it is absolutely necessary that a nation should have some of its best minds occupied with investigations into the ideas on which our social system is based. There should be some men set apart for the special purpose of examining the records of man's history, and gathering from them all the lessons that can be gathered. For those who are practically engaged in government are extremely apt to be misled by appearances, to be hurried into acts which seem rational, but are utterly irrational, and thus they may drag a nation into difficulties which may occasion misery and degradation to many. Some, indeed, might take objection to the use of such men, by affirming that much mischief has been wrought by speculative men attempting to force their systems on nations. But the objection is entirely without

force against teachers in a university. For they distinctly declare themselves to be searchers after truth, not practical men at all. They aim at discovering the laws of man's social system, and the ideal of government as it would present itself to the Divine mind, and they leave it to practical men to adapt their conclusions to the necessities of the age. But in a free country like ours, they have a certain function to perform essential to the good of the nation. For the abiding principle now of politicians in this country is that no measure of importance ought to be carried until the people are prepared for it. But what is the meaning of the people being prepared for it? The meaning is, until the people be convinced of the rationality of the measure. The people must feel that the measure is a salutary one—one in accordance with the best interests of the community, before they will work it out. Now the function of truth-seekers is just to show what is rational and what is irrational in our political and social arrangements, to investigate the idea of state, and to show how measures proposed either tend to benefit or injure the community. They seize hold of the ideas of government, of man individual and social, with living power. They set afloat a living apprehension of political truths, and thus counteract a fatal tendency in individuals and nations. For there is nothing so frequent as an absolute cessation of vitality in political ideas. Men often have not looked on the whole subject as one. They think it a noble thing to swear by the words of their fore-

fathers. It is a matter of no consequence what the words once meant, or what they now really mean. And they deem it consistent if a man adheres to certain formulas in a dead, passive, uncomprehending state of mind. Such men would soon lead a state into ruin. They cannot foresee the inevitable results of the lapse of time. Nations are changing every day, new demands are made, new cravings arise, new modes of action must be entered on. And the man who has not got hold of principles, who has not reached some sure ideas which can fit themselves to the changing circumstances, becomes an impediment to a nation's life, and, probably, will both damage others by his intolerant procedure, and be in the end himself trodden down. The truth-seekers are the provident men of the nation. They should discuss every question with entire freedom. The best social system will never be established until not only the truth be ascertained, but every counter-theory have seen its day. Our universities should therefore favour the pure investigation of truth, whatever the conclusions. And then we should not be afraid of socialism, or any ism; for we shall feel assured that the truth will triumph, if it have a fair field, and that the world will be the better of it.

In our country we have special need of searchers after political truth. Our Great Eastern of a state may strike against a rock any day, and where should we be if there has been no provision to prevent this or to get her off? I can see many difficulties arising in our way. Indeed, there are at the present moment two

distinct ones, at least, threatening us. In the House of Commons it is the custom that the Government resigns if it do not command a majority on every important question. Now this was all very well when men swore by their party. But a new spirit is pervading the country, a spirit of deep conscientiousness, and men will not vote to save ministers if they cannot do it conscientiously. The consequence is, that several times this country has found itself without a Government. As independent members become more numerous, as men think and act for themselves more resolutely, that peculiar phenomenon will take place more frequently. And unless some new arrangement be made in regard to our executive, we may see the reins of Government pass from the hands of the House of Commons into those of one or two men who will not set great store by our liberties. Any one who has read history with care, will allow the possibility of such a thing happening in an evil day. We are apt to think it impossible, because we have had the rare felicity of living in the reign of a sovereign who, by wonderful prudence, has gained the entire affections of a people capable of the deepest attachment.

Then, again, there is the matter of universal suffrage. A considerable number of writers now allow that all sane men have the right to vote; and many who do not allow that see that in the progress of the times universal suffrage is inevitable. Then arises the question, How is that universal suffrage to be granted, so that it may do injury to no class, but be a real benefit? What is the principle on

which representation should take place? We are greatly indebted to men like Mill, Hare, Lorimer, and others who have attempted solutions of this question. And I have only to add, that it would be of immense benefit to us, if men like these had places in our universities, so that they might devote the ample leisure of a life to the historical investigations and hard thinking which such subjects demand.

The good is seen, not only in the ideas which we get from the truth-seekers, but in the influence which they would exert on politicians and editors of newspapers, if they went through their hands. Both politicians and editors have to think rapidly. In the exercise of their functions, they must make up their minds in a very short time. It is therefore very essential to doing their work well, that they be trained beforehand in the most exact habits of thought, that they have acquired the power of seeing the whole of a thing at once, and of going out from a central idea. Otherwise their opinions will be wavering, unsatisfactory, and really worthless. Not only so, but they will be sure to fall into the mistake of assigning too high a value to some insignificant matter. This is the danger to which popular leaders are especially exposed. Like the British people, they can contain only one subject at a time, and for the time they treat that subject as if it were the only important one in the universe. We need a counterpoise to this one-sidedness; and such a counterpoise we should find in men willing to devote their lives to the investigation of political truth, and

able to send forth calm, dispassionate, clear ideas of all the laws and truths of our social state.

The same good results would follow in religious matters. I believe Christianity to be purely practical. "Believe in the Lord Jesus Christ, and thou shalt be saved." This is Christianity, the truth held by all churches of Christ in all times, and comprehensible by the highest and lowest intellects alike. But there are thousands of questions in regard to God which we desire to investigate. There are deep religious problems on every hand which we wish to settle for ourselves. The discussion of these can be carried on with the best hopes of success only by men who devote their lives to it. And in Christianity there are not merely theological problems, but there are historical problems to solve, problems which require great philological knowledge and much research into documentary evidence. I say here again, that it is of immense advantage that we should have a body of men who should investigate all these points in a completely independent way. I do not care what their conclusions may be. If they do not hit the truth, they will fall into confusions and absurdities, and we shall learn as much from their failures as from their successes. Now most of these points are points which workmen cannot settle satisfactorily and independently for themselves. For instance, how could a workman determine whether the book of Daniel was written by Daniel or not? For this purpose he must know Chaldee, he must be well acquainted with the contemporary history, he must be skilled in the laws of

criticism. Otherwise his opinion, as an original opinion, is worthless. But if there is a full and fair discussion of the question, he may approximate to a just opinion, and may have a fair idea of the evidence. I shall illustrate my meaning by a parallel case from physical science. An astronomer says that by calculation he has discovered a planet. Are we to believe him without ourselves making the calculation? Certainly we could have no strong confidence. But another astronomer makes the calculation, and he maintains that the first is wrong. Then another astronomer comes into the field and he examines, and another, and another, and at last all agree that the first was right and the second wrong. In this universal consent of a multitude of honest men well qualified to judge, we have a good reason for believing the truth. Now it is the same with the historical problems of the Old and New Testament. We may not be able to decide them for ourselves, nor even to understand the whole of the processes by which the truth is to be ascertained; but if we see those who are well qualified to judge, after great discussion and differences, come round to one decided opinion, then we may rely on that opinion with considerable confidence. If we have reason to imagine that the discussion has not been a fair one, that only one side has spoken out, or that any one side has spoken with imperfect knowledge and with strong prejudices, we cannot be perfectly satisfied. Here, then, the complete impartial discussion of theological truth is of essential moment to the welfare of the workman.

Of not less advantage will it be to him in the influence it will have on the teachers of Christianity. They must be trained for their work. For the simple proclamation of the fundamental truth of Christianity, "faith in Christ," nothing indeed is required but that the faith be in the preacher, that he have felt that this faith has saved him, and turned him from dead works to serve the living God. But the regular teacher of Christianity professes to do a great deal more. He professes to have gone over the whole range of Christian doctrine, to have done this for himself in an independent thorough manner. Now he cannot do this unless he has submitted to a long training process, and he is an abortion if he has not manfully worked out his own belief for himself. He has also a further duty to perform. He maintains that there is a book inspired by God which is his guide. To the interpretation of this book are his whole powers devoted. He may not exactly hold with Luther that true theology is nothing else than a knowledge of grammar, that is, a knowledge of Greek and Hebrew. But the statement of Melancthon is unquestionable, that Scripture cannot be understood theologically, unless it has first been understood grammatically.\* If he is to be an independent guide of the workman, it is plain that he must know Hebrew and Greek. He must have

\* The original words of these quotations are given in an interesting pamphlet, published by Bishop Wordsworth, on "The School Greek Grammar." From Joseph Scaliger are quoted the following words, "Non aliunde dissidia in Religione pendent quam ab ignoratione Grammaticæ."

studied the philosophy of language, and the laws of interpretation. He must be able to throw himself back into past ages, and realise the exact meaning of old words, of old modes of putting things. How can any one trust him if he is not able to do this? What should we think of a man who attempted to discuss the philosophy of Plato and the genuineness of his works, without a knowledge of Greek? We should be amazed at his impudence, but we should never dream of trusting his conclusions. And so it is with the clergyman. If he is not thoroughly master of Hebrew and Greek, he is not entitled to be a teacher in theology. He has not the means of forming a complete and satisfactory judgment. He may, for his own private benefit, form his own opinions, but these opinions are not the opinions of one who knows the whole evidence or can estimate it aright. The first and absolutely essential requisite of a body of regular ministers of the Christian religion is, that in addition to the right disposition they be thorough scholars. And if they are deficient in this respect, it is plain that they are neglecting one of the most imperative of their duties, and are placing themselves in an entirely false position. Workmen will not trust such preachers. If we are to have clergymen whom all classes can trust, they must be thorough scholars, they must be able to form independent opinions on all the questions connected with the canon of the Old and New Testaments, and to interpret these books for themselves. And we should expect our universities to send forth such men. If we had such men over the length and

breadth of the land, we might see greater unanimity on religious matters. Many such indeed there are; but if our universities ever do their work thoroughly, their numbers will be vastly increased, and the benefits will reach the working-classes.

## V.

### ON THE SCIENCE OF EDUCATION.

Definition of Education—Functions of a Science : to group Phenomena ; to ascertain Laws—Law reigns in the Phenomena of Mind—The efforts of Psychologists—Of what use is Psychology in Education ?—Objections answered : shows the right Methods ; estimates the value of subjects ; enables us to calculate Results.

IN this article we intend to discuss two much-disputed questions : Is there a science of education ? and is that science of use to practical educators ? In attempting to answer these questions, we must commence with a definition of education. This term is used in two senses, a general and a more restricted. In the wider sense, the term is applied to the drawing out of the powers of man, whatever be the agents which produce this effect. In this sense, external nature, the experiences of life, friends and enemies, in short, all that affects a man, are educating him. And a science of this kind of education would be an exhibition of the laws which regulate the development of his physical and mental powers.

In the more restricted sense of the term, education is the conscious efforts of human beings to draw out the natures of other human beings to the utmost perfection. This is the more usual meaning of the

term, and it is in this sense alone that we shall use it. Education, being a conscious effort to effect a purpose, and implying the application of means to an end, is an art. When, therefore, we speak of a science of education, we do not mean to assert that education is itself a science, but that it is based on a science; that a set of laws which it is the business of a science to discover can be used in the work of education. Now, this science can be no other than the science of the natures which are to be drawn out; for if they are drawn out according to fixed laws, then the educator has simply to take advantage of his knowledge of these laws. In other words, physical education is an applied physiology, and mental education is an applied psychology.

We seem to have answered the first question in thus stating the case. Almost every one will allow that physiology is a science, and therefore there must be a science of physical education. And perhaps there are few who would refuse to psychology the same title, and therefore mental education has also a science to regulate its procedure.

We dismiss from our notice at present physiology, and confine ourselves to psychology. We remark in regard to it, that we only appear to have answered the question; for psychology may be a science, and yet not form a basis for the art of education. We must look more minutely into the functions of a science.

These are, generally speaking, two. The first is to bring the phenomena with which the science is concerned into groups, until the highest possible

unity be reached. Thus, in natural history, the natural historian is principally employed in tracing resemblances, and thus grouping the various objects of his observation into classes. Now the psychology of this country has been, for the most part, occupied with generalisations of this nature. The various kinds of acts of the mind have been observed, and they have been grouped together under such names as memory, judgment, reasoning. They have been supposed to issue from separate and distinct powers of the mind. And even when the separate existence of these powers has been denied, we find them still used as generalisations under such terms as the presentative, conservative, reproductive, representative, elaborative, and regulative faculties. Again, the great effort of psychologists has been to ascertain what have been called the laws of thought; but by the laws of thought they do not mean the regular and fixed activities in which the mind produces thought, but the highest generalisations of all the individual products of thinking. Now these laws never can be of any use in education. They are absolutely barren and profitless; and this is allowed by professed metaphysicians. "Supposing," says Mansel, "that the act of thinking is governed by general laws at all (and that it is so, is manifest from the inability to conceive absurdities), such laws can clearly impart nothing in the way of instruction or the discovery of new truths."\* Accordingly, the practical educator may read through many treatises on psychology, and he will find curious discussions

\* Metaphysics, p. 231.

of insoluble problems, but he will not find much that will help him in his work. It is, we imagine, this experience which has led some to deny that there is a science of education at all.

But there is another function of science, and if we find psychological science discharge it, then we shall certainly have a science of education. This function of science is, from known and ascertained phenomena, to form generalisations which will explain and account for other phenomena. Such are, for the most part, the laws which constitute the physical sciences. We see one object affect another in a particular manner once; we notice it again and again, and still it affects it in the same way; and then we infer that the one object will always affect it in this way. We become acquainted thus with a considerable number of particular causes and effects; we then group the causes and effects, and express the result in a general law; and we expect that this general law will explain to us phenomena of which we have no direct means of discovering the cause. Now, if we could get a science of mind which should observe phenomena, causes and effects, and should group these causes into general laws, we should certainly have the kind of laws which we need. The previous generalisations of psychology which we have noticed are not properly laws at all; they regulate nothing. They are generalisations not of the activities of the mind, but of the products. Now, however, we are speaking of the generalisations of the activities. And we ask, Is a science of the activities of mind possible, and does such a science

exist? The answer, it seems to us, must be, that such a science of the mind's activities must be possible. If we are to perceive law anywhere, it must be in the phenomena of mind. We allow at once that such phenomena will be infinitely more complicated than those of matter; but this complication will not alter the fact of law. If a man has a strong desire for gold in his mind, I am sure that that desire for gold can be accounted for; that the strength of it can also be accounted for by the previous activities of the man's mind. Again, if a man is entirely deficient in the feeling of reverence, his deficiency must be explicable through the previous activities of his mind. In fact, the man's mind, in its present state, can be nothing else than the original powers of mind granted him plus the activities through which it has gone, whatever may have been the agents in producing these activities.

This point, then, we think, must be set down as settled, that law reigns in the phenomena of mind. There is the further question, Have these laws been ascertained? Now, we allow at once that all the laws have not been ascertained; but this is merely saying that the science has not reached perfection. It would be rash to say that any science has arrived at this stage. But if we can assert that one single law has been discovered, we have done enough to show that a foundation for the science has been laid; and we can scarcely believe that any one will go so far as to contradict such an assertion. Our common psychological text-books are barren enough in the exhibition of laws of activities, but still they

do contain some. The generalisation, for instance, with regard to perception proper and sensation proper, that they are always found in an inverse ratio to each other in the degree or intensity of their existence, is a law that regulates the activities of the mind. And when psychology enables us to determine what it is which produces the intensity of the sensation and of the perception, we obtain the means of acting in a powerful manner on the minds of others. This the new psychology of Beneke does. Again, the laws of association, though in the common psychology they are mixed up with inoperative generalisations, are in the main laws of the mind's activity. We have such laws scattered over most treatises on psychology. We have them brought out more prominently in the writings of Locke, and in those of the Scotch school, especially Dugald Stewart; in the French school, who have worked out the Scotch; and still more fully and satisfactorily in the more recent works of Bain and Spencer, of Morell, and of Fortlage, Fichte, and others of the Germans, who are endeavouring to establish an anthropological psychology. But all these schools occupy themselves with subjects of discussion which are purely metaphysical; and it is only in the works of Beneke and his followers that metaphysical questions and inoperative generalisations are entirely discarded, except in so far as psychology has to account for the rise of such generalisations in the mind. And we wish to draw attention to the fact, that the effort to render psychology an exposition of the laws which regulate the activities of the mind, and not of the

mere generalisations of its products, was occasioned by a desire to make these laws operative in education. It was principally the interest which Herbart felt in education that led him to his psychological investigations; and Beneke's labours had their direction given both by the successes and the failures of Herbart's system. It is also principally in educational works that one will find the facts, and many of the laws, which ought to have their place in a scientific exposition of the phenomena of mind.

We trust, then, that we have proved that there is a science of mind, and that though it may not have reached perfection, yet it has discovered many important laws which regulate the mental activities.

The second question which we have undertaken to answer is, Is that science of use? This question has frequently been answered in the negative, because psychology has been supposed to occupy itself with those so called laws of thought, the uselessness of which, as regulative, we have already acknowledged. But if we have a psychology which will give us the laws which regulate the activities of the mind, then the answer must be in the affirmative. Either education, as an art, attempts its work at haphazard, or it attempts it with a knowledge of the adaptability of the means to the end. Now it is plain that education ought not to be a mere groping in the dark, a mere matter of chance. And if it is not, it cannot accomplish its end, unless that end be definitely known. And that end cannot be known but by an investigation into the activities and capabilities of the mind. Nor can it find suitable means

to its end unless it know what effect the agents which act on the mind will produce. Both the nature of the person to be educated, and the power of the means used to affect that nature in a particular way, must be clearly ascertained.

All this will be allowed by some, and yet a negative answer given to our question. "It is true," they will say, "that the teacher should know human nature in the concrete, but it is questionable whether he should study the science of the phenomena of mind. For a great number of the best teachers never troubled themselves about the phenomena of human nature, and never read a treatise on psychology; but, guided by their instinct and their tact, did the right thing at the right time, and made men of their pupils. Nay, we are not sure but a scientific knowledge of the phenomena of the human mind may render a teacher less effective in his work than he would have been without the knowledge."

There is some show of truth in these objections. There is no doubt that the man who devotes himself to the investigation of mental law assumes for the time a state of mind adverse to successful teaching. The man who tries to discover new laws, fixes his eye on the similarities which present themselves in certain activities of the mind, and refuses to observe for the time the differences. And then after he has attained to the knowledge of the law for which he is seeking, his interest in the individual phenomena is apt to cease, and he contents himself with the general formula. It is the business of the teacher, on the other hand, to keep all the individual pheno-

mena distinctly before his eye. In his action on his pupil, he must leave none of the peculiarities out of sight. He has to deal with a complicated series of individual phenomena, widely differing from each other. And therefore his state of mind is quite different from that of the man who is in search of mental laws. We allow this. But we assert, at the same time, that there is nothing irreconcilable in the two states. The psychological law in the matter is, that if the teacher consciously produce in his mind both states with equal intensity, he will be equally expert in both. If he practises himself in turning from the one state to the other, he will become expert in the operation. And he may thus be able to conjoin both modes of thought, without the one interfering with the other. At the same time, he is not called in a special manner to join both. He is supposed at particular times to have studied the phenomena and laws of mind. These laws are in his mind, ready to be summoned to the explanation of peculiar appearances in his pupils, so as to direct him in dealing with them. It is his business in his class-room to take all the features of a case into view; and psychology will give its aid, after he has made this particular examination, in explaining each individual peculiarity, and showing how it is to be treated. He will leave the discovery of laws to another place and time, unless these laws actually force themselves on him, as they sometimes do. His main object will be to apply the laws that have been discovered.

Again, we allow that there have been many good

teachers who have known nothing of the science of education, as it is given by philosophical writers. But when we analyse the tact which directs them, we find it to be a kind of undeveloped knowledge of the laws of mind—a knowledge which the educator possesses, but to which, from its appearing in a state of weakened consciousness, he cannot give expression. An instance will explain what we mean. A teacher resolves to do his utmost to interest every member of his class. This desire grows in intensity, as the desire is repeated day after day, and we may therefore reckon it as a powerful motive. To fulfil this desire, he watches each individual pupil, and when the interest of any pupil flags, he does the very thing that will attract that pupil. His course of conduct in the various cases will be different, according to circumstances; but the one object he has in all is to interest them, and what he cares about especially is that he succeed in interesting them. After he has succeeded, and his work is over, we go to him and ask how he has contrived to attract the attention of pupils so different from each other. He cannot tell. Nay, very likely, he cannot give an accurate account of what efforts he made to interest each pupil, as he saw him flag. Why? Because the intensity of the desire, which in all cases was one and the same, darkened or diminished his consciousness of the various means which he employed for the purpose, and the processes of thought through which his mind went to determine these means. But there can scarcely be a doubt that his mind did go through

processes ; and if we could bring these processes into clear consciousness, we should find that he had determined his conduct according to the fixed laws of mind which he had at some time or other observed, though he had not definitely noted them down as such. But his tact may sometimes fail him ; and what is he to do then ? Moreover, he cannot communicate his tact to another. For both reasons, it would be of advantage to him to possess a scientific knowledge of the mind, and his tact would then become the deliberate and fully conscious application of means to an end.

A knowledge of the science of education is then, we believe, of great use to the educator. We shall point out three of its uses.

First, A knowledge of the science of education can direct us as to the right methods of education. It discusses the aims and ends of education, and the means to be employed for accomplishing the ends. It inquires into the nature of the being to be educated, into the subjects of study by means of which he is to be educated, and into the qualifications requisite in him who undertakes the duty of educating. A good method can be the result only of a careful deliberation on all these points. The science of education within these last fifty years has received a great deal of attention ; and what has been the consequence ? A mighty revolution has by degrees taken place in our modes of teaching, and is still taking place. Look how differently infants are now treated from what they were fifty years ago ; how the weakness of their power of attention is taken

into account ; how their pure sensuousness is continually appealed to, and how every effort is made to help them to take in knowledge with pleasure, instead of its being crammed into them with a rod ! And this change is the result of a study of the mind of the infant. We are adapting our modes to nature. Great changes have taken place also in our methods of teaching geography, modern and ancient languages, and in almost every department. True it is that, in multitudes of schools, the most perverse methods are still to be seen in use ; but as a knowledge of the science of mind becomes general among our teachers, these perverse methods will vanish entirely. And we may expect that, as the science of education becomes more and more studied, improvements will take place even in schools where already vast improvements have been introduced. Take, for instance, the law that the human being must make his intuitions in sufficient numbers and accuracy before he can have representations ; and that he must do the same with his representations before he can make his abstractions. This law is capable of endless application, in geography, in history, in mathematics, in theology ; and though the law is partially recognised, yet we meet everywhere with departures from it. We have heard of teachers who taught geography without maps. It is no uncommon thing to introduce the child to a map of the world before he has the slightest conception of the size of his own county. Again, we see children receiving prizes for making long chronological tables of events and dates, as if that were

history, before they had foundations in experience to help them to realise the events which they so painfully record, or the length of the periods which their figures indicate. And worst of all, children are compelled to commit to memory abstract theological propositions before they have the power of abstraction at all, or before they have *felt* the majesty of the Divine presence, the tenderness of the Divine mercy, and the peace that comes from confidence in God. Now all these, and many other, mistakes would be avoided, if our teachers had to undertake a complete study of the laws of the development of our nature. The science of education is still, comparatively speaking, in its infancy; and we cannot predict what possible discoveries may be made. There is nowhere such an amount of change presented in phenomena as in those of the mind. The infant cannot distinguish at first one object from another; he cannot speak, he cannot will: he looks like a purely sensuous animal. Yet he emerges from this state into a consciousness of the outer world, into a consciousness of himself. Scientific psychology has endeavoured to ascertain the steps by which the child passes from the unconscious to the conscious state; and in this investigation has laid open the principal laws of consciousness. Through them we know how to bring what lies unconsciously in the mind to a state of consciousness. It then traces the gradual appearance in the mind of representations and reasonings, of æsthetic and religious thought and feeling, the formation of groups of desires, the excitement of

feelings, and groups of feelings. When practical educators come to survey their work with a knowledge of the laws which have thus been discovered, we may confidently look forward to the time when greater improvements shall take place in our educational methods than any that have hitherto been suggested. "Behind education," says Kant in his "*Pädagogik*,"\* "lies the secret of the perfection of human nature. From the present time onward this can take place. For now for the first time do we begin to judge rightly, and see clearly what especially belongs to a good education. It is delightful to lay before ourselves the thought that human nature will ever be better developed through education, and that education will be brought into a form adapted to humanity. This opens up to us the prospect of a happier race of men in the future."

Secondly, A study of the science of education will enable us to estimate the value of the various subjects of instruction in an educational point of view. There is nothing to which men are more prone than one-sidedness; but one-sidedness in education is often a fatal mistake. There is indeed great difficulty in apprising the educational power of the various subjects which are to be taught. For the activities of the human mind are the most complex of all activities. To render representation possible, in some cases thousands of intuitions have to be made, and intuitions blend with intuitions, representations with representations, desires with desires, and feelings with feelings, in such a complex

\* Werke, Th. ix. p. 373.

way that analysis seems almost impossible. Yet there is no reason for despair. The phenomena are within reach. And if we patiently observe, we may be able to set down the educative power of any subject of study. Scientific psychology has attempted to do this, and, we think, with considerable success. And the success will be greater and more certain in proportion to the accuracy of future observers. How valuable this analysis is we may feel in some measure when we see men of great literary power, who have not studied the science of education in all its ramifications, differ on the most ordinary subjects. Recently three of our Quarterly Reviews have discussed the question of Classical Education. Not one of them could determine what place classics should hold in education. Two of them had no distinct idea what the education of the nineteenth century should be, and the one that proposed a change set forth a plan which violates some fundamental laws of mind. We maintain that this uncertainty does not exist; that observation and a study of the laws of mind furnish us with ample means for determining what should be the right system of education; and that, if the science of education were better known and more studied, we should attain to something approaching unanimity of opinion.

Thirdly, As a corollary to the preceding, but a very important one, the study of the science of education enables us to calculate results, and is often the only means we have for so doing. A teacher, for instance, exerts a constant educational influence for four or five years on a pupil; but as soon as the

pupil's education is over he disappears, and the teacher hears nothing, or next to nothing, of him for long periods. It is impossible for the teacher in such circumstances to trace the results of his exertions. Then education is effected not by one or two great efforts, but by myriads of repeated efforts, and the results do not show themselves immediately, but often long after the pupils have gone into the pursuits of active life. Examinations indeed may test to what extent the pupil has retained the knowledge that was put into him; but this knowledge is, of all kinds of knowledge, least productive of true manhood. Though we may measure the reproductive power of the pupil to some extent, there is no gauge that can measure his productive power, his self-activity, his capability to think for himself, his intellectual individuality; and all these are the highest aims of an intellectual education. Again, there is no method of determining how far a teacher has been successful in instilling into his pupils a love of truth for its own sake, conscientiousness, courage, and a love of God and man. These in this world receive no special marks of distinction. They are not necessarily crowned by wealth, or fame, or honours. The man may pass to his grave possessed of the noblest qualities, and having received the very best education, without the fact being known but to a few intimate acquaintances. Again, if a pupil turn out well, it is absurd to attribute his success to his teacher alone, as if his teacher could be the only cause. There are, as we have seen, thousands of influences acting on and developing in some direction the mind of every

man; and even at the very time during which the teacher is exerting his influence, it would be impossible always to observe the effect of that influence in a given case. How much more complicated does the calculation become at a future stage! The boy who has been acted upon by the teacher in the way best calculated to bring out all his powers in the noblest way may turn out a wreck, a victim to the lowest vices; and the boy who would have been corrupted, if his teacher could have done it, may turn out upright, honest, brave, and intelligent. We have chosen extreme cases, but they are possible, for the influences acting on a boy's mind from other quarters may entirely overbalance the influence of the teacher. How then are teachers to calculate the result? By the careful observation of individual cases, by a careful consideration of what result each process of instruction or action is calculated to produce, we may determine definitely what ought to be the result of each mode of action and instruction. The total result of a teacher's exertions will be the accumulated results of all the individual exertions; and if he can thus determine in each case, he will feel assured that, as far as his exertions have gone, they have acted in really educating the boy. Now the science of education can, by a most careful analysis, come to something like an accurate determination of the effect which a particular activity may produce. Its special work is to record cause and effect. The continued observations of scientific psychologists have determined certain fixed sequences, and will determine more of these sequences; and the

teacher, guided by a knowledge of these, will follow one course, and avoid another. Especially in doubtful cases will he be glad to have recourse to this psychological analysis; and, in fact, there often lies for him no other course than either to proceed at haphazard, or to determine the matter according to the nature of the boy he has to act on, and the nature of the tools with which he has to work.

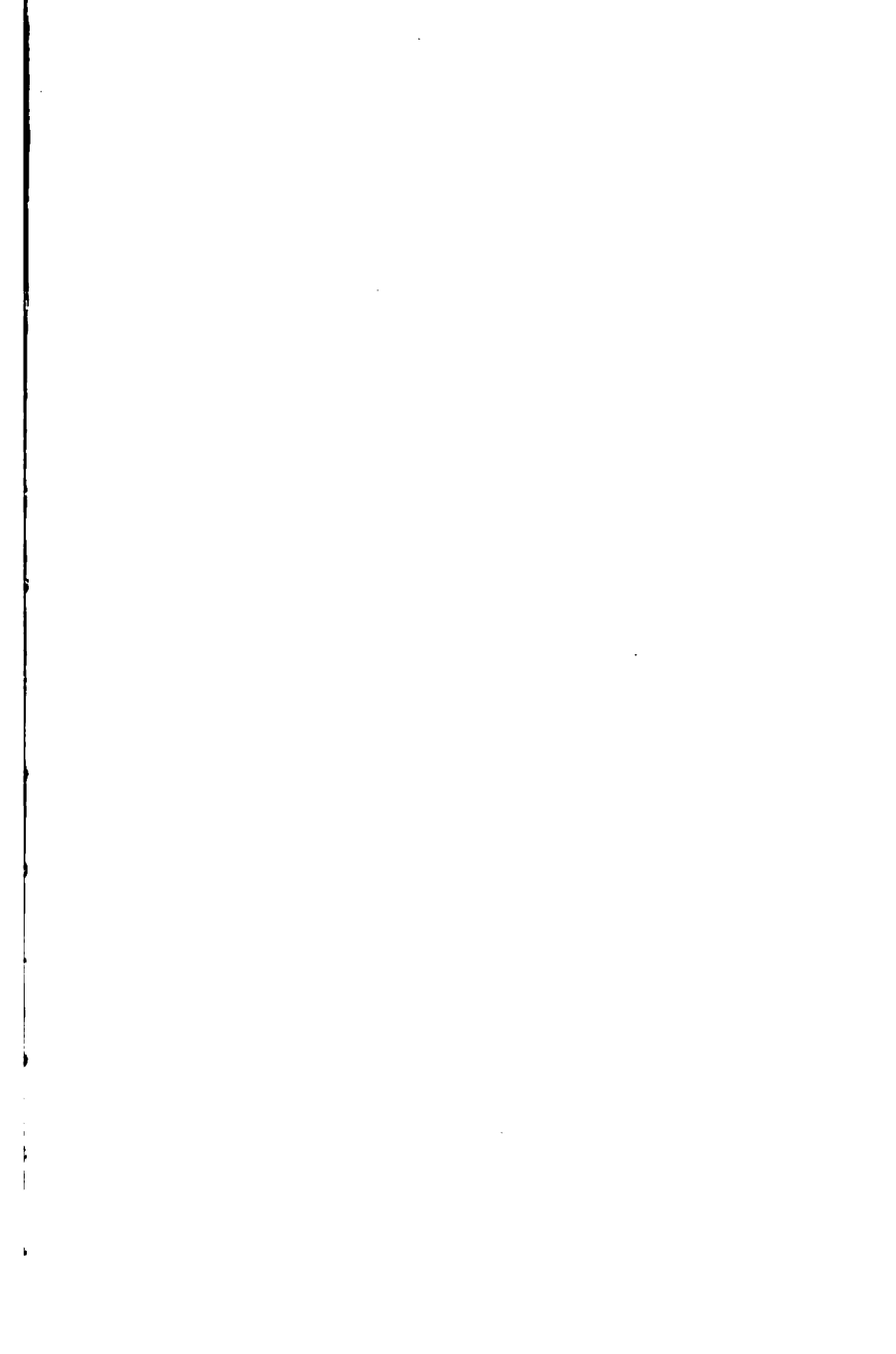
If we have at all succeeded in showing that there is a science of education, and that a knowledge of that science is of great use to the educator, the practical conclusion follows that all teachers should study this science; and another conclusion follows from that, that all teachers should be provided with the means of studying the science. In other words, there should be in every one of our universities professorships of the Science of Education. The teacher should be led through a survey of the whole sphere of his future activity by a man who has especially devoted himself to the investigation of the laws by which mind is developed. It may perhaps seem strange that it should be necessary that we should urge the demand that Government should establish such professorships, but we are well aware how difficult it is to get Government to do anything which is not asked for in a clamorous way by a large body of the people. Indeed, we have been partly led to write this article by a knowledge of what were the feelings of one at least of the Government officials in regard to this matter. Two years ago the late Professor Pillans went to London in the hope of prevailing on Government to establish

a professorship of Didactics, as he wished to call it, in the University of Edinburgh. He was armed with a letter from Lord Brougham, warmly approving of his design, and he was ready to contribute a large sum of money as a foundation for the professor's salary, if Government would aid him. His expedition, however, was fruitless, and on coming back he told us that he had failed because Mr. Lowe maintained that there was no science of education. All honour to Professor Pillans for his efforts, and, we trust, if his pupils raise any memorial to his memory, it will be in the shape of a chair of Didactics.

In the meantime teachers should everywhere clamour for the establishment of such professorships, as the Educational Institute of Scotland has for years persisted in doing; and even should Government fail to do its duty, perhaps some of those rich benevolent men who adorn our country may see that they could not invest a large sum of money in a way better calculated to be permanently beneficial to the masses of our population than in thoroughly equipped professorships of the Science of Education.

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